Code: 9A05503

R09

B.Tech III Year I Semester (R09) Supplementary Examinations June 2017
COMPUTER GRAPHICS
(Common to CSE and ECC)

Time: 3 hours   Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks
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1 (a) What do you mean by raster? Name some raster scan devices.
   (b) Explain why RGB color model is used for display. How different shades of colors are generated on the RGB monitors?

2 (a) What are graphic primitives? Mention some typical graphic primitives that a package may provide.
   (b) What is inside test? Explain two methods for finding out a pixel is inside the polygon or outside of the polygon.

3 (a) Give a brief note about on dimensional viewing functions. Give an example which uses two dimensional viewing functions.
   (b) Classify the perspective projections and explain about each.

4 (a) What is CSS? Discuss the merits and demerits of CSS.
   (b) List out the limitations of retained-mode packages.

5 (a) Write algorithm for displaying a parametric cubic curve.
   (b) Explain briefly about quadric surfaces.

6 (a) What is pure primitive instancing? What are its properties? Explain it with example.
   (b) Explain how cell decomposition is used to represent a solid object.

7   What is CIE chromaticity diagram in computer graphics? Explain its usage with example.

8 (a) Explain how a camera model can be improved?
   (b) Write a brief note on recursive ray tracing.

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