

SRI VIDYA COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF MECHANICAL ENGINEERING
ME6501 COMPUTER AIDED DESIGN QUESTION BANK
UNIT – III
Part A

1. What is color model?
2. What is color Gamut?
3. Differentiate Shades, Tints and Tones.
4. Distinguish between hidden line removal and hidden surface removal models.
5. State the salient features of RGB color space.
6. What is Morphing?
7. What is meant by Hidden-Line removal?
8. What is meant by bounding box test?
9. Write short notes on generic hidden-line algorithm.
10. Explain depth-buffer algorithm.
11. What is meant by gourmand shading.
12. Why phong shading is more computationally demanding than gouraud shading.
13. How scan-line coherence contributes to the efficient computation of hidden surface images.
14. What is Warnock's algorithm?
15. What are the light sources identified in shading models.
16. What is constant shading?
17. Explain shading enhancements.
18. Define computer animation.
19. What is real-time computer animation?
20. What are the steps followed by Slider-crank mechanism based on computer animation.

Part B

1. Explain briefly with sketches any six tests used for hidden line identification.
2. Explain briefly Phong shading and Gouraud shading.
3. Explain outline the steps required to generate a hidden-surface image using the depth-buffer approach and then comment on the relative merits of this approach compared with the scan-line algorithm.
4. Explain the surface algorithms for surface hidden removal of an object.
5. Write note on sample hidden line algorithms.
6. Explain the area oriented algorithm and Priority algorithm for hidden line removal.
7. Write note on Ray/Primitive intersection module of ray tracing algorithm.
8. Explain briefly RGB and CMY color model.
9. Write notes on Frame-Buffer animation and animation techniques with an example.
10. Explain key frame technique of computer animation with an example.