Assignment No. 4

Computer Graphics

1. What is the difference between Bezier curve and B-spline curve?
2. Explain parametric and non parametric curves with examples
3. For the position vectors P1 [1 2] and P2 [4 3] determine the parametric representation of the line segment between them. Also determine the slope and tangent vector of the line segment.
4. Write and explain the non-parametric and parametric representations for a circle in the first quadrant
5. What is Bezier curve? Write down the properties of Bezier curve .
6. Given Bo[1 1], B1[2 3], B2[4 3] and B3[3 1] the vertices of Bezier polygon, determine seven points on the Bezier curve.
7. What is B-spline curve? Write down the properties of B-spline curves
8. What do you mean by hidden surface removal? Discuss z- buffer algorithm in detail with its advantages and disadvantages
9. Explain Warnock’s area subdivision algorithm in detail.