**SCS1302 - Computer Graphics and Multimedia Systems**

**Assignment – 2**

**Long Answer:**

1. Formulate and Generate B-Spline curve. Explain with an example.

**Short Answers:**

1. What is CSG?

2. Discuss the mathematical background of Bezier curve?

3. State the purpose of fractals?

4. Given a 3D triangle with coordinate points A(7, 4, 2), B(4, 6, 1), C(2, 5, 6). Apply the reflection on the XY plane and find out the new coordinates of the object.

5. Given a 3D triangle with points (0, 0, 0), (1, 1, 2) and (1, 1, 3). Apply shear parameter 2 on X axis, 2 on Y axis and 3 on Z axis and find out the new coordinates of the object.

**Fill in the Blanks:**

1. Quadratic Bezier curve has \_\_\_\_\_ control points.

2. Examples of 3 D transformations in graphics are ——— , ————

3. A fractal which is self-similar at each point is known as ———

4. ———— is the equation of a plane surface.

5. \_\_\_\_ is the degree of Cubic Bezier curve.

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