## Department Of Computer Science

## Teaching Plan

| Discipline            | :      | Computer Science (Honours) |  |  |
|-----------------------|--------|----------------------------|--|--|
| Semester              | :      | Six                        |  |  |
| Paper Code            | :      | CC14P                      |  |  |
| Subject               | :      | Computer Graphics Lab      |  |  |
| Name of the faculty   | :      | Soumya Chakraborty         |  |  |
| Duration: 21st Februa | ry,202 | 23 to 10th June,2023       |  |  |

| Sl<br>No | Topics   | No of<br>Lectures | Duration<br>in Hours |
|----------|--|-------------------|----------------------|
| 1        | Write a program to implement Bresenham's line drawing algorithm.   | 2                 | 4                    |
| 2        | Write a program to implement mid-point circle drawing algorithm.   | 2                 | 4                    |
| 3        | Write a program to clip a line using Cohen and Sutherland line clipping algorithm.   | 2                 | 4                    |
| 4        | Write a program to clip a polygon using<br>Sutherland Hodgeman algorithm.  | 2                 | 4                    |
| 5        | Write a program to apply various 2D<br>transformations on a 2D object (use homogenous<br>coordinates).                             | 2                 | 4                    |
| 6        | Write a program to apply various 3D<br>transformations on a 3D object and then apply<br>parallel and perspective projection on it. | 2                 | 4                    |
| 7        | Write a program to draw Hermite/Bezier curve.  | 2                 | 4                    |

## Reference Book:

1. Computer Graphics by D. Hearn, M. Baker, Prentice Hall of India, 2008.