**LESSON PLAN 2023-24**

**NAME:-Ms. Parminder Kaur DEPARTMENT: - Computer Science**

**CLASS: - BCA-6th Sem SUBJECT: -Computer Graphics**

| **WEEK** | **TOPIC** |
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| JAN-I | Introduction to Computer Graphics; Interactive and Passive Graphics; Applications of Computer Graphics; Display Devices: CRT; Random Scan, Raster Scan |
| JAN-II | Refresh Rate and Interlacing, Bit Planes, Color Depth, Color Palette, Color CRT Monitor, DVST, Flat-Panel Displays: Plasma Panel, |
| JAN-III | LED, LCD; Lookup Table, Interactive Input Devices, Display Processor |
| JAN-IV | General Purpose Graphics Software, Coordinate Representations |
| JAN-V | Point-Plotting Techniques: Scan Conversion, Scan-Converting a Straight Line: The Symmetrical DDA, The Simple DDA, Bresenham’s Line Algorithm |
| FEB-I | Scan-Converting a Circle: Circle drawing using Polar Coordinates, Bresenham’s Circle Algorithm, Scan-Converting an Ellipse |
| FEB-II | Polynomial Method, Trigonometric Method; Polygon Area Filling: Scan-line Fill and Flood Fill Algorithms |
| FEB-III | Two-Dimensional Graphics Transformation: Basic Transformations: Translation, Rotation, Scaling |
| FEB-IV | Matrix Representations and Homogeneous Coordinates; Other Transformations: Reflection, Shearing |
| MARCH-I | Coordinate Transformations; Composite Transformations; Inverse Transformation; Affine Transformations; Raster Transformation, Graphical Input: Pointing and Positioning Devices and Techniques |
| MARCH-II | Two-Dimensional Viewing: Window and Viewport, 2-D Viewing Transformation Clipping: Point Clipping; Line Clipping: Cohen-Sutherland Line Clipping Algorithm |
| MARCH-III | Mid-Point Subdivision Line Clipping Algorithm; Polygon Clipping: Sutherland-Hodgman Polygon Clipping Algorithm |
| MARCH-IV | Three-Dimensional Graphics: Three-Dimensional Display Methods; 3-D Transformations: Translation, Rotation, Scaling; Composite Transformations; |
| APRIL-I | Revision |
| APRIL-II | Old Question Paper |