Duration: 3hrs   **[Max Marks:80]**

N.B. : (1) Question No 1 is Compulsory.

       (2) Attempt any three questions out of the remaining five.

       (3) All questions carry equal marks.

       (4) Assume suitable data, if required and state it clearly.

1   Attempt any FOUR   **[20]**

   a   What are the different types of coordinate system. Explain with example.

   b   Explain DDA line drawing algorithm.

   c   What is 2D transformation? Write 2D matrix of each one.

   d   Explain Koch Curve.

   e   Differentiate Lossy Compression and Lossless Compression.

2   a   Explain Midpoint algorithm for circle.   **[10]**

   b   Explain Flood Fill Algorithm along with source code.   **[10]**

3   a   Explain Liang-Barsky Clipping Algorithm.   **[10]**

   b   Explain lossless Compression algorithm in detail.   **[10]**

4   a   Explain 3D composite transformations.   **[10]**

   b   What are the types of Video signals? Explain Video file format. Also explain   **[10]**

       Audio data format and structure.

5   a   Explain in detail about Fractal Dimension.   **[10]**

   b   Explain Cohen- Sutherland Line clipping algorithm.   **[10]**

6   a   Explain WAV file format in detail.   **[10]**

   b   Explain different Clipping operations.   **[10]**

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