



**WEST BENGAL STATE UNIVERSITY**

B.Sc. Honours 6th Semester Examination, 2023

**CMSACOR14P-COMPUTER SCIENCE (CC14)**

**COMPUTER GRAPHICS (PRACTICAL)**

**SET-II**

Time Allotted: 4 Hours

Full Marks: 10

*The figures in the margin indicate full marks.  
Candidates should answer in their own words and adhere to the word limit as practicable.  
All symbols are of usual significance.*

**Answer any one question from the following**

10×1 = 10

1. Write a program to clip a line using Cohen and Sutherland line clipping algorithm.
2. Write a program to clip a polygon using Sutherland Hodgeman algorithm.
3. Write a program to implement mid-point circle drawing algorithm.
4. Write a program to implement Bresenham's line drawing algorithm.
5. Write a program to apply 2D rotation of 45 degree on a 2D object and mirror reflection of the object about the line  $y = x$  (use homogeneous coordinates).
6. Write a program to implement Mid-point Line drawing algorithm.
7. Write a program to implement DDA Line drawing algorithm.
8. Write a program to apply parallel projection on a 3D object.
9. Write a program to apply perspective projection on a 3D object.
10. Write a program to apply translation along horizontal direction on a 3D object.

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