

Faculty of Science & Information Technology
Department of Computer Science and Engineering
Final Examination, Fall 2024

Course Code: CSE421, Course Title: Computer Graphics

Level: 4 Term: 1 Teacher: All

Time: 2:00 Hrs

Mark

Answer ALL Questions

[The figures in the right margin indicate the full marks and corresponding course outcomes of each question must be answered sequentially.]

1. a) Compare two types of projection. [3]

b) Which color model is better? Explain. [2]

c) Define surface rendering? Why it is important? [2]

d) Explain visual defects occur in Figure-A. How can you remove this jagged image in the context of Computer Graphics? [3]



Figure A

2. From the following figure- B

i. Identify the coordinates of each point. [10]

ii. Discover new object after rotate the cube ** degrees along the Z axis. ** is the last two digits of your ID.

iii. Find out the new object by performing reflection operation in y axis.

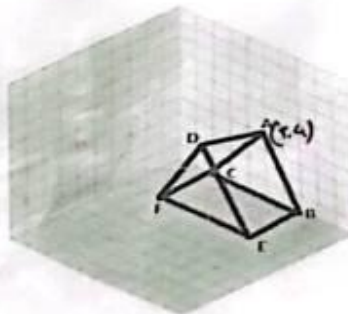


Figure B

algorithm should you use to clip subject polygon? Show the whole procedure using anticlockwise direction only. [10]

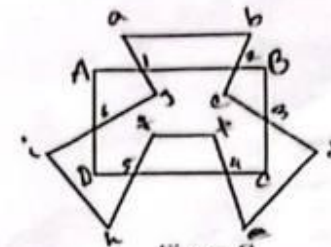


Figure C

4. Apply appropriate line clipping algorithm for the following Figure D [11]

i) Identify the categories of lines AB, CD, EF, GH, IJ, KL and MN.

ii) Perform Clipping operation

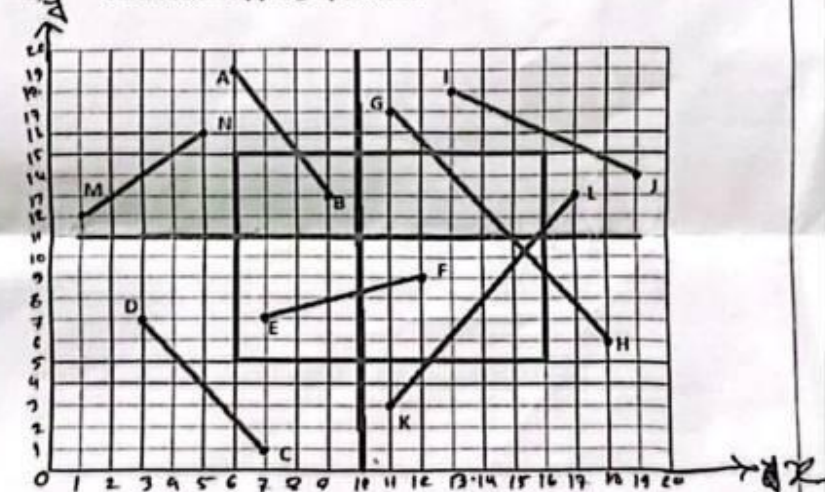


Figure D