CLASS: IMSC   SEMESTER : IX
BRANCH: MATH AND COMP   SESSION : MO/2022

SUBJECT: CA601 COMPUTER GRAPHICS

TIME: 3:00 Hours   FULL MARKS: 50

INSTRUCTIONS:
1. The question paper contains 5 questions each of 10 marks and total 50 marks.
2. Attempt all questions.
3. The missing data, if any, may be assumed suitably.
4. Before attempting the question paper, be sure that you have got the correct question paper.
5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.

Q.1(a)	Discuss on various uses/applications of computer graphics.	[2]	CO1,K2
Q.1(b)	Compare between DDA and Bresenham line drawing algorithm.	[3]	CO2,K4
Q.1(c)	Explain Cohen-Sutherland Line clipping algorithm.	[5]	CO2,K2
Q.2(a)	Explain different ways to express resolution of graphics display.	[2]	CO1,K2
Q.2(b)	Summarize the importance of homogenous coordinate system for geometric transformation.	[3]	CO2,K6
Q.2(c)	Reflect the triangle given by points (2,2), (3,3), (3,1) with respect to the line x=1 using 2D Homogeneous coordinates system. Get the transformed triangle.	[5]	CO2,K3
Q.3(a)	Discriminate between parallel and perspective projection.	[2]	CO4,K4
Q.3(b)	Classify different types of parallel projections.	[3]	CO4,K2
Q.3(c)	Derive an expression for oblique projection.	[5]	CO4,K3
Q.4(a)	Mention various computer graphics input devices.	[2]	CO3,K1
Q.4(b)	Clarify the logic behind RGB color model.	[3]	CO3,K2
Q.4(c)	Discuss Beizer spline for curve design.	[5]	CO3,K2
Q.5(a)	Classify major types of illumination model.	[2]	CO5,K2
Q.5(b)	Describe out features of intensity interpolation scheme for polygon surface rendering. CO5	[3]	CO5,K2
Q.5(c)	Discuss depth sorting method for visible surface determination.	[5]	CO5,K2