

**M.Sc. (MATHEMATICS WITH APPLICATIONS IN COMPUTER SCIENCE)
M.Sc. (MACS)**

00146

Term-End Practical Examination

December, 2016

MMTE-004(P) : COMPUTER GRAPHICS

Time : $1\frac{1}{2}$ Hours

Maximum Marks : 40

Note : (i) *There are two questions in this paper, totalling 30 marks.*

(ii) *Answer **both** of them.*

(iii) *Remaining 10 marks are for viva-voce.*

1. Write a 'C' program to implement Liang-Barsky line clipping algorithm to clip a triangle with vertices (0, 0), (4, 5) and (6, 1) against the window having two diagonally opposite corners at (1, 1) and (5, 4). 15

 2. Write a 'C' program to implement the scan line polygon fill algorithm to fill a polygon whose vertices in the clockwise directions are $P_1 = (2, 2)$, $P_2 = (3, 5)$, $P_3 = (5, 9)$, $P_4 = (7, 8)$, $P_5 = (8, 4)$, $P_6 = (6, 3)$ and $P_7 = P_1$. 15
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