

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- FEBRUARY 2018

B.Tech VI Semester

COURSE CODE: 11B1WCI611

MAX. MARKS: 15

COURSE NAME: Computer Graphics

COURSE CREDITS: 04

MAX. TIME: 1 Hrs

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.

1. Define the resolution with respect to pixel depth for a 256 color monitor? [2]

2.
 - (a) How does a raster scan display system work?
 - (b) What are the different components of a raster system?
 - (c) Explain interlacing in this regard. [1+1+1]

3. Technically what is the difference between the DDA, Bresenham's and mid-point line drawing algorithm in context of the rasterizing it on a digital display? Assume floating point evaluation takes twice the time of an integer evaluation. [4]

4.
 - (a) Derive the decision parameter for rasterizing a circle.
 - (b) Rasterize it using your derived parameter for a circle of radius 5 centered at (0, 0) [3+3]