BTS-V(S.S)-04-22-0681 Reg. No. | | | | | | | | |

B

B.Tech. Degree V Semester Special Supplementary Examination April 2022

CS 15-1506 COMPUTER GRAPHICS

(2015 Scheme)

Time: 3 Hours Maximum Marks: 60

PART A

(Answer *ALL* questions)

(10 × 2 = 20)

I. (a) Explain shadow mask crt.
(b) Compare raster scan and random scan systems.
(c) Explain the logical classification of input devices.
(d) Expain cohen Sutherland line clipping.
(e) Prove that successive scaling are multiplicative.
(f) Explain sutherland Hodgman polygon clipping.
(g) Compare image space and object space approach.
(h) Explain back face detection.
(i) Explain constant intensity shading.
(j) Explain RGB color system.

PART B

(4 × 10 = 40)

II. Explain midpoint circle drawing algorithm. Generate the intermediate points for the cicele whose centre is at (0,3) and radius 3. (10)

OR

III. Explain dda line drawing algorithm. Generate the intermediate points for the line whose end points are (10,10) and (20,18). (10)

IV. Explain two dimensional viewing pipe line. (10)

OR

V. Explain the basic two dimensional transformations. (10)

VI. Explain three dimensional rotation of an object about arbitrary axis in three dimensional space. (10)

OR

VII. Explain z buffer algorithm. What are the limitations of it? How can we rectify it? (10)

VIII. Explain Gouraud shading and Phong Shading. (10)

OR

IX. Explain the steps involved in designing an animation sequence. Explain how the motions of objects can be specified in an animation system. (10)

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