



UTTARAKHAND OPEN UNIVERSITY, HALDWANI (NAINITAL)
उत्तराखण्ड मुक्त विश्वविद्यालय, हल्द्वानी (नैनीताल)

BCA-16/BCA-17 3RD YEAR 5TH SEMESTER ASSIGNMENT

Session - 2017-18, Summer Last Date of Submission: 31st October 2017

Session - 2017-18, Winter Last Date of Submission: 30th April 2018

Course Title: Interactive Computer Graphics

Course Code: BCA-17

Maximum Marks: 30/20

Section 'A' contains 08 short answer type questions of 4/2.5 marks each. Learners are required to answers 4 questions only. Answers of short answer-type questions must be restricted to 250 words approximately.

1. Write the short notes on the following :
 - (a) Aspect Ratio
 - (b) Retracing
 - (c) Persistence
 - (d) Resolution
 - (e) Frame Buffer
2. Explain ellipse drawing algorithm.
3. Explain 3D Rotation Translation and scaling with derivation.
4. What are different methods of text clipping?
5. Derivate the point clipping algorithm.
6. Give the mathematical description of the perspective projection.
7. How many types of Animation. Explain.
8. Differentiate between raster scan display & random scan display.

Section 'B' contains 04 long answer-type questions of 7/5 marks each. Learners are required to answers 02 questions only.

1. What are the important applications of computer graphics? Explain the working of Flat Panel Display, Plasma Panel Display and LCD in detail.

2. What do you mean by scan conversion of an object? Give the algorithm for scan conversion of line using Bresenham's Algorithm.
3. Describe the color models in computer graphics.
4. What do you mean by windowing and viewing transformation? Derivate the Cohen-sutherland line clipping algorithm.

