Graphic Era
HILL UNIVERSITY
Established by an Act of the State Legislature of Uttarakhand (Adhiniyam Sankhya 12 of 2011)
University under section 2(f) of UGC Act, 1956

Term Evaluation (Even) Semester Examination March 2025

Roll no..22.92.116.....

Name of the Course and semester: BCA 6th
Name of the Paper: Computer Graphics
Paper Code: TBC601
Time: 1.5 hour   Maximum Marks: 50

Note:

(i) Answer all the questions by choosing any one of the sub questions
(ii) Each question carries 10 marks.
(iii) Please specify COs against each question.

Q1. (10 Marks)

a. Describe different types of curves and shapes for parametric equations of lines and conics in computer graphics? (CO2)

OR

b. Explain the display devices where two and more than two electron guns are there with suitable diagram. (CO1)

Q2. (10 Marks)

a. Explain the raster and vector scan display with suitable diagram. (CO2)

OR

b. Evaluate the performance of different technique used in computer graphics to remove the aliasing effect. (CO1)

Q3. (10 Marks)

a. Differentiate between dithering and halftoning in computer graphics. (CO1)

OR

b. If vector |A+B| = |A-B| find out the angle between A and B vectors. When the angles between two vectors are perpendicular, same direction and opposite direction? (CO4)

Q4. (10 Marks)

a. How dot and cross product between two vector U and V are calculated. Explain with suitable example. (CO4)

OR

b. How to perform the K scalar multiplication in given vector Ai+Bj+Ck? Explain with suitable example. If two vectors are given as 2i+3j+4k and 3i+j+3k then find out the addition and subtraction? (CO4)

Q5. (10 Marks)

a. Explain cathode ray tube components with diagram. Explain persistent rate and aspect ratio. (CO1)

OR

b. Explain the layer's functionality of liquid crystal display, how LCD is different from LED explain? (CO2)