Roll No: ....

Total No. of Questions : 09]

[Total No. of Pages :02

Paper ID [CS309]

MAY-08
~~DEC-07~~

(Please fill this Paper ID in OMR Sheet)

B.Tech. (Sem. - 5ᵗʰ)
COMPUTER GRAPHICS (CS - 309)

Time : 03 Hours

Maximum Marks : 60

Instruction to Candidates:

1) Section - A is **Compulsory**.

2) Attempt any **Four** questions from Section - B.

3) Attempt any **Two** questions from Section - C.

Section - A

Q1)

$(10 \times 2 = 20)$

a) What is aspect ratio?

b) Define scan conversion.

c) What is clipping?

d) Define rendering?

e) What is antializing?

f) List two important characteristics of homogeneous coordinates? .

g) List two important properties of raster devices.

h) What is scaling?

i) Define geometric transformations.

j) What are windowing transformations?

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P.T.O.

Section - B

Q2) Explain the operating characteristics of plasma panels.

Q3) What is rotation? Explain two dimensional rotation in brief.

Q4) Differentiate between gourad and phong shading in brief.

Q5) Explain the steps involved in z-buffer algorithm with example.

Q6) Explain the working principle of mouse.

Section - C

(2 × 10 = 20)

Q7) What is a Bezier curve? Discuss its properties. Explain the Bezier surfaces in brief.

Q8) Show that two successive reflections about either of the coordinate axes is equivalent to a single rotation about the coordinate origin.

Q9) Write short notes on the following:
a) Floating horizon.
b) Vanishing points.

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