SHAHEED BHAGAT SINGH STATE TECHNICAL CAMPUS, FEROZEPUR

ROLL NO : | | | | | | | | | | | | |

Total number of pages:[01]

Total number of questions: 07

B.C.A./ 6th Sem

Computer Graphics

Subject Code: BSBC602 (R6|RP)

Paper ID: M|18

(2011 onwards)

Time allowed: 3 Hrs **Max Marks:60**

Important Instructions:

- **All questions are compulsory**

PART A (10x 2marks)

Q. 1. Answer in brief:

(a) What is computer graphics?

(b) Define resolution.

(c) What do you mean by composite transformation?

(d) Differentiate random scan and raster scan.

(e) What is frame buffer?

(f) Why is Bresenham algorithm better than DDA?

(g) What is frame buffer?

(h) Define refresh rate.

(i) What is projection? Explain its types.

(j) What are the components of the CRT?

PART B (5×8marks)

Q. 2. List various output devices. Explain working of any one. CO1

OR

Explain the use of computer graphics different applications. CO1

Q. 3. Write DDA line drawing algorithm and explain it with suitable example. CO2

OR

How is a circle plotted with the help of Bresenham method? Explain. CO2

Q. 4. Write short notes on the following: CO3

(a) Shadow mask method (b) Scan Conversion process.

OR CO3

Perform a 60 degree rotation of a triangle A(0, 0), B(1, 1), C(5,2)

(i) About the origin (ii) About point P(-1, -1).

Q. 5. Explain 2-D scaling using homogeneous coordinates. CO4

OR

Explain Sutherland Hodgeman for polygon clipping with example. CO4

Q. 6. Explain 3-D viewing transformation. CO5

OR

Explain perspective projections in detail. CO5