1. A translation is applied to an object by  
a) Repositioning it along with straight line path  
b) Repositioning it along with circular path  
c) Only b  
d) All of the mentioned  
View Answer

Answer: a  
Explanation: A translation is applied to an object by repositioning it along with straight line path from one location to another.

2) The original coordinates of the point in polar coordinates are :

a. X’=r cos (Ф +ϴ) and Y’=r cos (Ф +ϴ)

b.X’=r cos (Ф +ϴ) and Y’=r sin (Ф +ϴ)

c. X’=r cos (Ф -ϴ) and Y’=r cos (Ф -ϴ)

d. X’=r cos (Ф +ϴ) and Y’=r sin (Ф -ϴ)

Ans:B

3) Positive values for the rotation angle ϴ defines

(A) Counterclockwise rotations about the endpoints

**(B)** Counterclockwise translation about the pivot point

**(C)** Counterclockwise rotations about the pivot point

**(D)** Clockwise rotations about the pivot point

ANS: C

4) In Bresenham's algorithm, while generating a circle , it is easy to generate?

a. One octant first and other by successive rotation

b. One octant first and other by successive translation

c. One octant first and other by successive reflection

d. All octants

Answer: (c). One octant first and other by successive reflection

5) A line with endpoints codes as 0000 and 0100 is ?

a. Completely visible

b. Completely invisible

c. Partially invisible

d. Trivially invisible

Answer: (c). Partially invisible

6) In the raster scan method for transformation, a 90º rotation can be performed by ?

a. by coping each row of the block into a column in the new frame buffer location

b. reversing the order of bits within each row in the frame buffer

c. by performing XOR on the frame buffer location

d. None of above

Answer: (a). by coping each row of the block into a column in the new frame buffer location

7) Line produced by moving pen is \_\_ at the end points than the line produced by the pixel replication?

a. straight

b. thin

c. both (a) and (b)

d. thicker

Answer: (d). thicker

8) The region code 0000 represents the\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

a. bottom clipping window

b. right clipping window

c. left clipping window

d. viewing window

Answer: (d).

viewing window

9) A two dimensional rotation is applied to an object by repositioning it along a?

a. upward in the x-y plane

b. diagonals path in the x-y plane

c. circular path in the x-y plane

d. straight path in the x-y plane

Answer: (c).

circular path in the x-y plane

10) If an object is rotated through an angle A in clockwise direction, the rotation matrix R= ...............

a. cos A sin A-sin A cos A

b. cos A -sin Asin A cos A

c. sin A cos A - cos A sin A

d. None

Answer: (a).

cos A sin A-sin A cos A

11) Forming products of transformation matrices is often referred as

a. Concatenation

b. Composition

c. both a & b

d. None of above

Answer: (c).

both a & b

12) The process of mapping a world window in world coordinate system to viewport are called

a. Transformation viewing

b. Viewport

c. Clipping window

d. Screen coordinate system

Answer: (a).

Transformation viewing