Name :) Vedika Badoni

Course :) BCA 'C'

University Roll no :) 1121162

Subject :) Computer graphic

Subject Code :) PBC 602

Algo (Mid Point Circle)

Ans 2)

Step 1 :) Start

Step 2 :) Put x = radius
y = 0
err = 1 - radius

Step 3 :) Repeat Steps while x >= y

plot (x, y)

if (err <= 0)

Set { err += 2*y + 1;

y += 1 ; (end if)

if (err > 0)

Set x -= 1;

err = 2*x + 1; end loop

Vedika

Program

```
#include <stdio.h>
#include <graphics.h>
void drawcircle(int xo, int yo, int radius)
{
    int x = radius;
    int y = 0;
    int err = 0;
    while(x >= y)
    {
        putpixel(xo+x, yo+y, 7);
        putpixel(xo+y, yo+x, 7);
        putpixel(xo-y, yo+x, 7);
        putpixel(xo-y, yo+y, 7);
        putpixel(xo-x, yo+y, 7);
        putpixel(xo-y, yo-x, 7);
        putpixel(xo+y, yo-x, 7);
        putpixel(xo+x, yo-y, 7);
        if (err<=0)
        {
            y+=1;
            err+= 2*y+1;
        }
        if (err>0)
        {
            x-= 1;
            err = 2*x+1;
        }
    }
}
```

(2)

```
int main()
{
    int gd dive = DETECT, gmode, error, x, y, r;
    printf("Enter radius of circle:");
    scanf("%d", &r);
    printf("Enter coordinate of ~~first~~ center (x & y):");
    scanf("%d %d", &x, &y);
    initgraph(&gdriver, &gmode, "");
    drawcircle(x, y, r);
    delay(9999999);
    return 0;
}
```