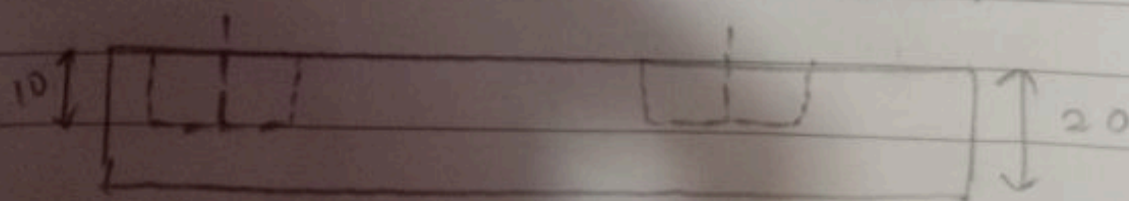Name : Sufiyan Ahmad Chaudhry
Roll NO : 06    PRN No. 50641920181162511002
Semester :    Branch : Mechanical Inginessing.
Subject : Manufacturing process

Assignment 7 :. To develop a: manual
                part program of a given
                Component on CNC milling
                Machine Using Canned cycle

part Drawing :

## Absolute Co-ordinate system

| point (P) | x | y |
|---|---|---|
| 0 | 0 | 0 |
| 1 | 30 | 30 |
| 2 | 90 | 30 |
| 3 | 90 | 70 |
| 4 | 30 | 70 |

## Part program

```
O    1001
N10    G90    G21    G24;
N20    M06    T01    ;
N30    M03    5900;
N40    G00    X30    y30;
N50    M08    ;
N60    G00    Z5;
N70    G81    G99    X30    y30 Z-15
                                R5,F0.2
N80    X90;
N90    Y70;
N100   X30;
N110   G80    G00    20    M09;
N120   G00    2300   M05;
N130   M30;
```

# Explantion

| | | |
|---|---|---|
| G90 | - | Absolute Programing. |
| G21 | - | Feed in mm/min |
| G94 | - | metric System |
| M06 | - | Tool Change (Drill 10mm dia) |
| M03 | - | Spindle on |
| 900 | - | Speed of Spindle |
| G00 | - | Rapid traverse |
| M08 | - | Coolant on |
| G81 | - | Canned Drilling cycle |
| G99 | - | Return to referece level or R point. |
| X30 Y30 | - | X and y co-ordinated for hole no-1 |
| R5 | - | Reference point. |
| Z-15 | - | 15mm depth of drill |
| F0.2 | - | feed |
| G80 | - | Cancel Canned Drilling cycle. |
| M09 | - | Coolant off |
| Z300 | - | Move drill above worpiece |
| M05 | - | Spindle Stop |
| M30 | - | Reset the progam. |