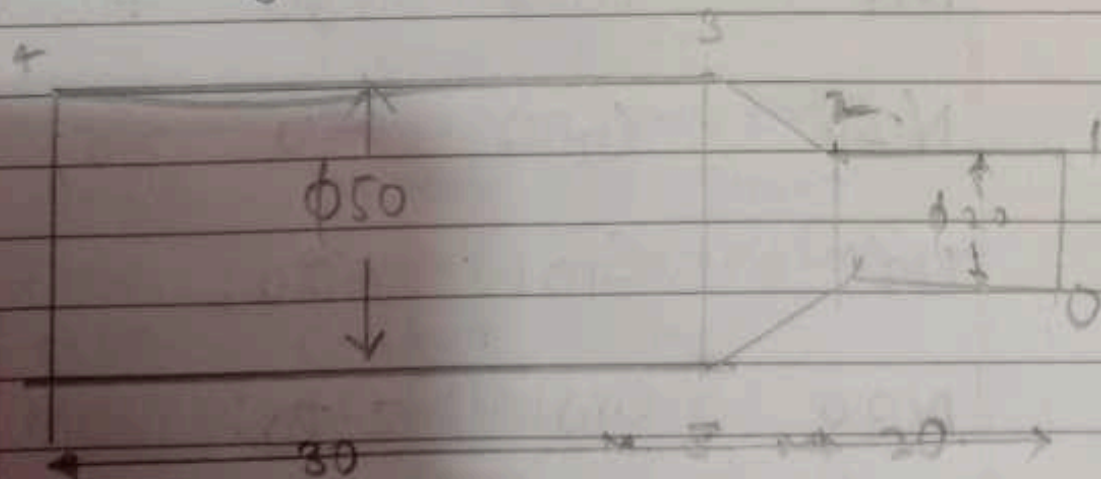


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Roll No: 06 PRN: 5064192018162511002
Semester: 07 Branch: Mechanical
Engineering
Subject: - Manufacturing II.

Assignment 2: To develop manual
part programming of a
given component on CNC
lathe using G and M
codes

Part Drawing



Absolute Co-ordinate system (G90)

Point(P)	X	Y
0	0	0
1	20	0
2	20	-20
3	50	-25
4	50	-55

Part Program :

O1010

N105 G90 G96 G12;

N110 M03 M07

N115 T0101 S500 F0.3;

N120 G00 X0 Z0;

N125 G01 X20;

N130 G01 Z-20;

N135 G01 X50 Z-25;

N140 G01 Z-55;

N145 G00 Z100;

N50 M09 ;

N55 M05 ;

N60 M30 ;

Explanation :

O1010	program Name
G90	absolute co-ordinate System
G96	constant Surface Cutting Speed
G21	Metric Conversion System
M03	Spindle on (clockwise direction)
M07	Coolant on (Mist type)
T0101	Tool No 01 and offset No 01
S500	Spindle Speed
F0.3	Feed rate
G00	Rapid Traverse
X020	origin off Part
G01	linear Interpolation
M09	Coolant off
M05	Spindle stop
M30	Reset the program