

SUBMITTED TO

ENGR. ZEESHAN AHAD

SUBMITTED BY:

M. AFAQ KHAN

STUDENT ID :

7700

SUBJECT :

CONSTRUCTION

MANAGEMENT

SECTION :

B

QUESTION # 01

PART # 01

1

<u>S.NO</u>	<u>ACTIVITIES :</u>
01	Survey of plot.
02	Layout.
03	Excavations for foundation.
04	Concrete, 1:4:8.
05	footing for columns.
06	Reinforcements for columns.
07	formwork for columns.
08	Column concreting.
09	Brickwork.
10.	plastering.
11.	Electrical work.
12.	Sewerage line and plumbing.
13.	Plinth Beam Reinforcement.
14.	form work for plinth beam.
15.	concreting for plinth beam.
16.	slab formwork for Basement.

17. Beam work for basement. (3)
18. Concreting for beam and slab.
19. Reinforcement Extension of columns.
20. Brickwork upto ground floor.
21. Formwork for columns of ground floor.
22. Concreting of column for ground floor.
23. Formwork for beam and slab of floor.
24. Reinforcement for Beam and slab of ground floor.
25. Concreting for Beam and slab of ground floor.
26. Reinforcement Extension for columns upto first floor.
27. first floor brickwork.
28. Form work for columns of first floor.
29. Concrete work for columns.
30. Formwork for beam & slab.
31. Reinforcement for beam and slab.
32. Concreting for Beam and slab for first floor.

33.

Tile work.

(2)

34.

Over head Tank.

35.

Painting.

36.

Window and door frames.

37.

Stair case for Basement.

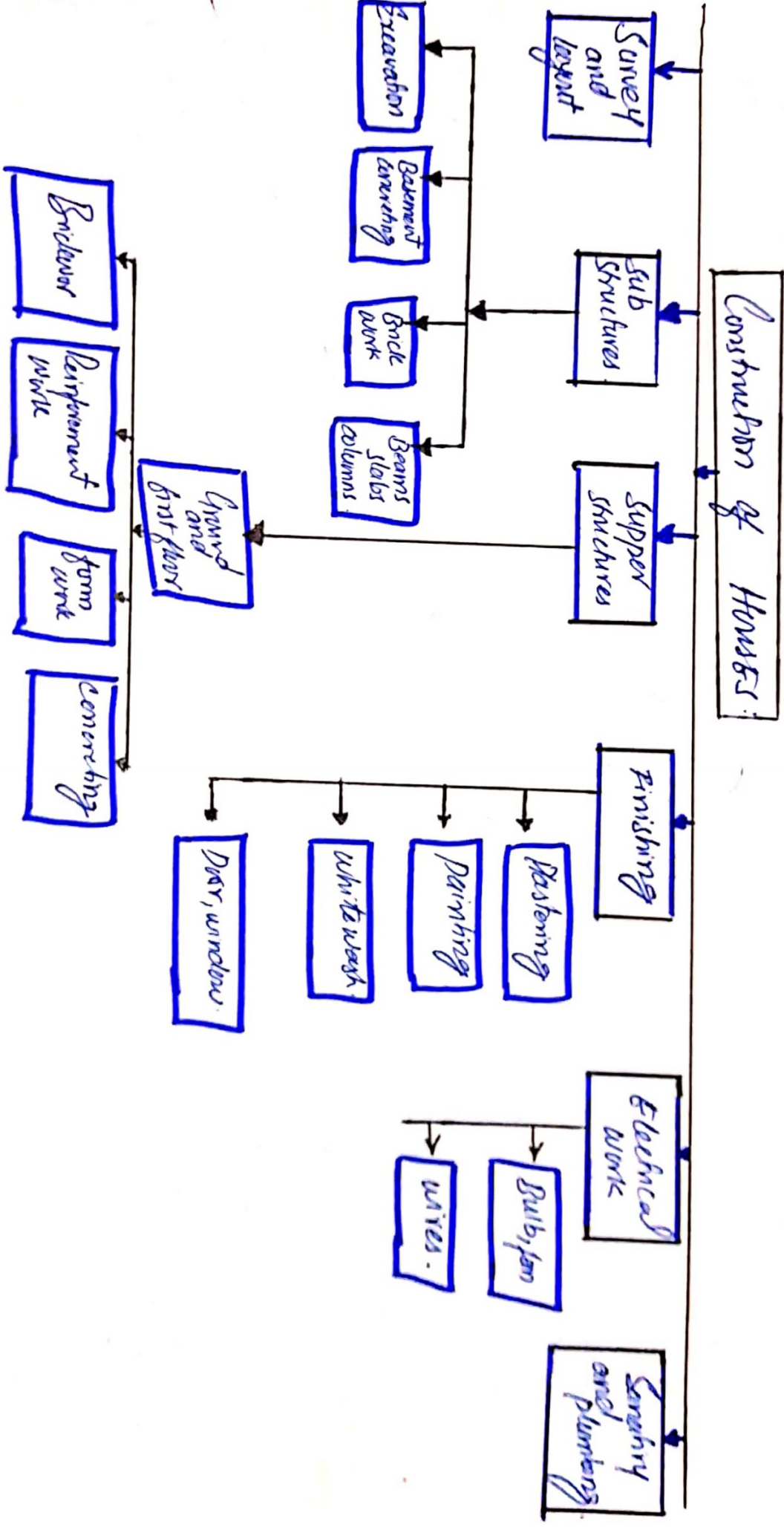
38.

Stair case for ground floor

39.

Stair case for first floor.

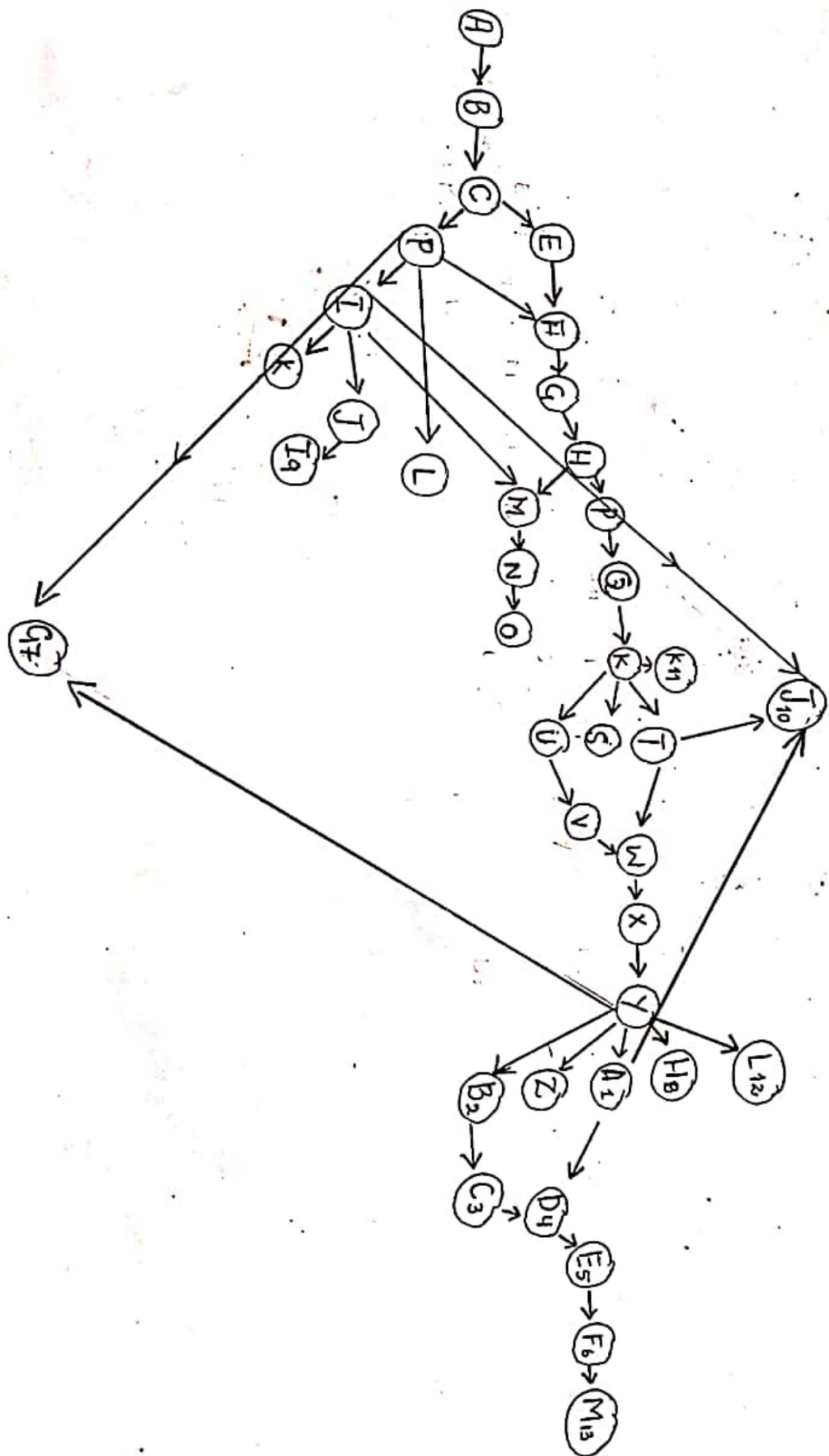
WORK BREAKDOWN STRUCTURE

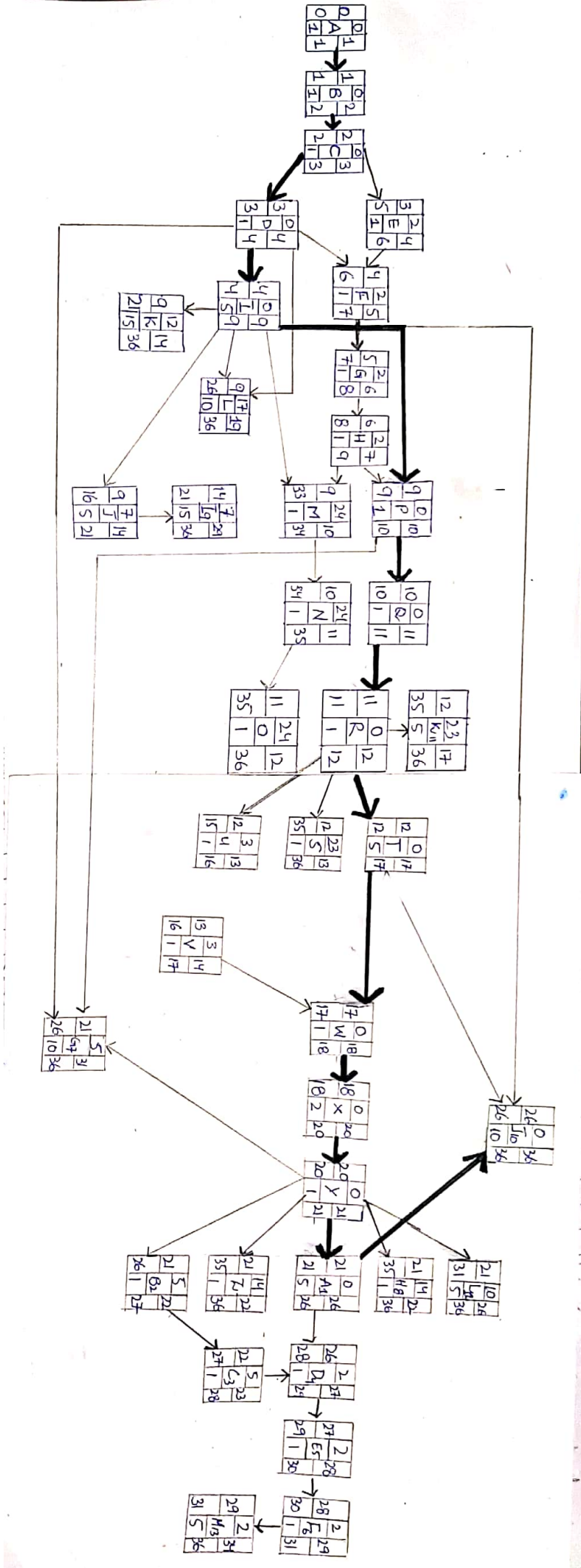


SYMBOL	ACTIVITY	PREDECESSOR	DAYS	SLACK TIME
A	Survey of plot.	-	1	0
B	Layout	A	1	0
C	Excavation for foundation.	B	1	0
D	Concrete 1:4:8	C	1	0
E	footing for columns.	C	1	2.
F	Reinforcement for columns.	E	1	2.
G	formwork for columns	F	1	2.
H	column concreting	G	1	2.
I	Brick work	D	5	0
J	Plastering	I	5	7
K	Electrical work	I	5	12.
L	Sewage line and plumbing	I, D	10	17
M	Plinth Beam Reinforcement	I, H	1	24.
N	Plinth Beam formwork	M	1	24
O	Concreting for plinth beam	N	1	24.
P	formwork for Basement slab.	I, H	1	0
Q.	Beamwork for Basement	P	1	0
R.	Concreting upto first floor	Q	5	0
S	Reinforcement Extension of column.	R	1	23.

T	Brick work upto first floor	R	5 (5)	0
U	Column formwork of G.F	R	1	3
V	Column concreting of ground story.	U	1	3
W	Formwork for slab of ground floor	V, T	1	0
X	Reinforcement for Basement slab	W	2	0
Y	Concreting for Beams and slab of ground floor	X	1	0
Z	Extension of columns	Y	1	14
A ₁	Brickwork of first floor	Y	5	0
B ₂	formwork for column of first floor	Y	1	5
C ₃	concreting for column of first floor	B ₂	1	5
D ₄	formwork for beams and slab	C ₃ , A ₁	1	2
E ₅	Reinforcement for Beam and slab.	D ₄	1	2
F ₆	concreting for Beams and slab of first floor	E ₅	1	2
G ₇	Floor plastering and Tile work.	D, P, X	10	5
H ₈	Over head work (Tank)	Y	6	14
I ₉	Painting	J	15	7

J ₁₀	Window and door frame	T, T, A ₁	10	0 (6)
K ₁₁	Stair Case (Basement)	R	5	23.
L ₁₂	Stair Case (ground floor)	y	5.	10
M ₁₃	Stair Case (first floor)	F ₆	5	2.





PATH :

1. A, B, C, D, I, P, Q, R, T, W, X, Y, A, J₁₀

Time period:

$$1+1+1+1+5+1+1+1+5+1+2+1+5+10 \\ = 36 \text{ days.}$$

2. A, B, C, D, I, P, Q, R, T, J₁₀

Time period: $1+1+1+1+5+1+1+1+5+10$
 $= 27 \text{ days.}$

3. A, B, C, D, I, J₁₀

Time period: $1+1+1+1+5+10$
 $= 19 \text{ days.}$

CRITICAL PATH :

The path having 36 days are critical path of this project.

Max Time :

Maximum Time is 36 days.

Slack Time :

In timeline Table :