

NAME : HAMAD

Reg No : 7747

SECTION : "B"

SUBJECT : Construction
Management

DEPT : Civil ENGR

SEMESTER : 8th

EXAM : MID TERM

INSTRUCTOR : Engr Zeeshan
Ahad

QUESTION : NO : 1
ANSWER

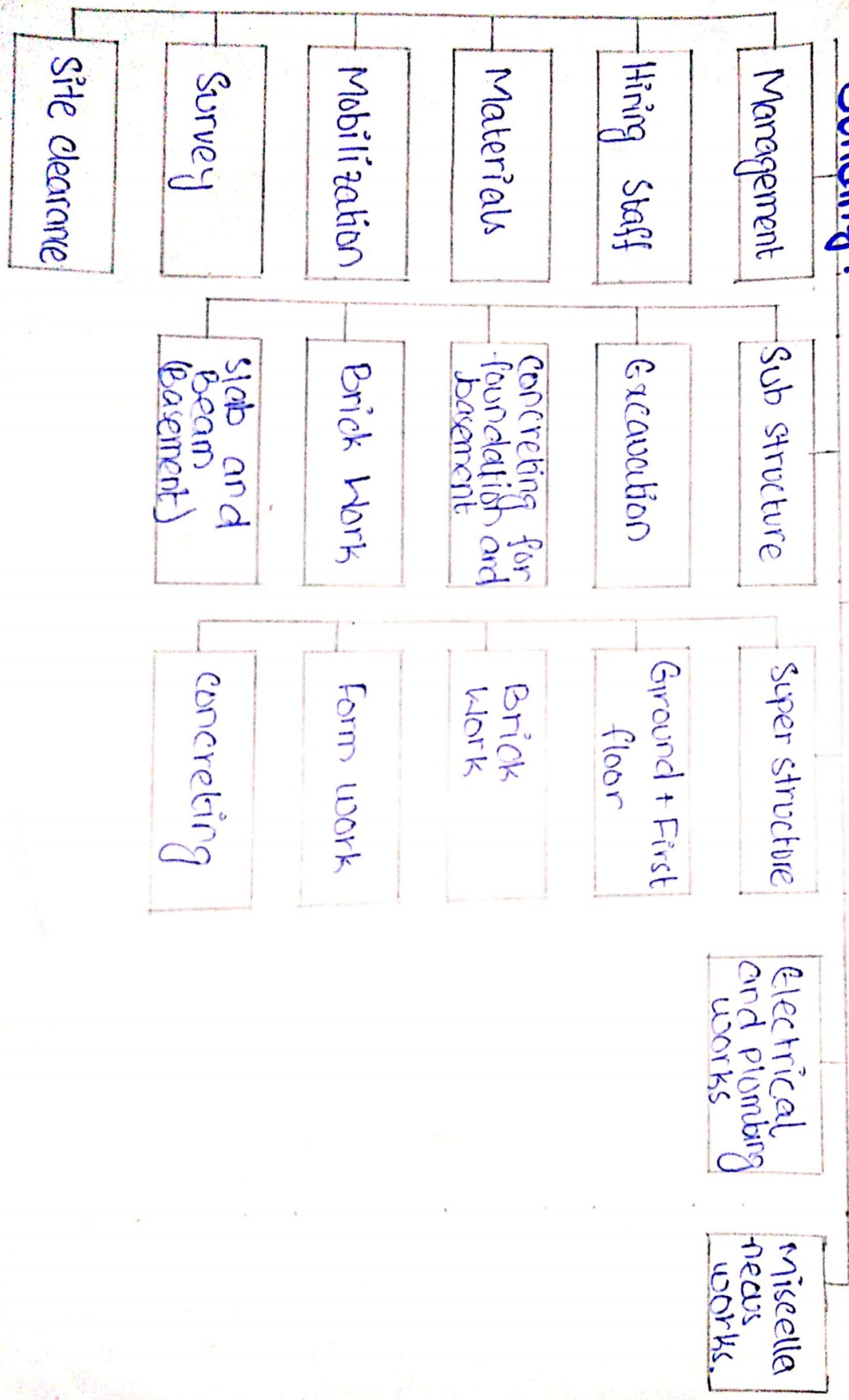
Activity list of a two story Building

- * Survey
- * Mobilization
- * Grubbing of site
- * layout & excavation
- * Foundation & column
- * Brick masonry walls
- * Formwork
- * Concreting (Beam & slab)
- * Curing
- * Flooring
- * Blockwork
- * Plumbing & sanitary work
- * Electrification
- * Finishing
- * Miscellaneous

Q:2 Work breakdown

Structure of Building?

Construction of building



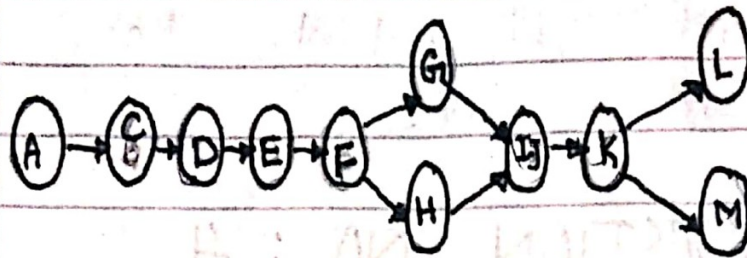
QUESTION : NO : 3

ANSWER

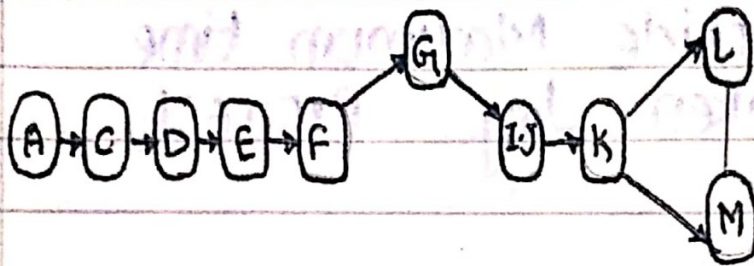
Critical Path Method

ACTIVITY		Predecessors	Duration in week
Survey	A		1
Mobilization	B		1
Grubbing of site	C	A	1
layout & excavation	D	C	2
Formwork	E	D	4
Foundation & column	F	E	3
Concreting	G	F	3
Brick work	H	F	3
Plumb & sanitary	I	G, H	2
Electrification	J	G, H	2
Finishing	K	I, J	3
flooring	L	K	2
Woodwork	M	K, L	3
Miscellaneous	N		3

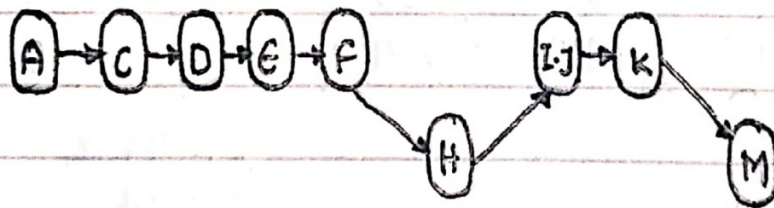
PREDECESSOR DIAGRAM



PART A :



PART B :



These are two paths of our project path

A ₄ B

Path A (ACDEFGHIJKLM) having 26 weeks.

Path B (ACDEFHIJKM) having 24 weeks.

So the critical path of our project is path A which has more time.

QUESTION NO : 4

ANSWER

Provide Maximum time taken by project....

0	A	I	1	C	2	2	D	4	4	E	8	8	F	11
0	I	I	1	1	2	2	2	4	4	4	8	8	3	11

11	G	14
11	3	14

21	L	23
21	2	23

14	J	18	18	K	21
14	4	18	18	3	21

11	H	14
11	3	14

23	M	26
23	3	26

As according to forward pass and backward pass the maximum time for our project is 26 week.

"S" Provide slack time for the activities if any.....

Slack = late finish - early finish

$$A = 1 - 1 = 0$$

$$C = 2 - 2 = 0$$

$$D = 4 - 4 = 0$$

$E = 8 - 8$ & so on all values comes zero so no slack.

Slack = late start - early start

$$A = 0 - 0 = 0$$

$$C = 1 - 1 = 0$$

$$D = 2 - 2 = 0$$

$$E = 4 - 4 = 0$$

And so on all values comes zero so no slack.