

Department of B.E Civil Engineering



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Assignment # Mid Paper

Semester: 8th

Section : "C"

Subject: Construction Management

Submitted to: Engr. Zeeshan Ahad sab



ACTIVITY LIST:

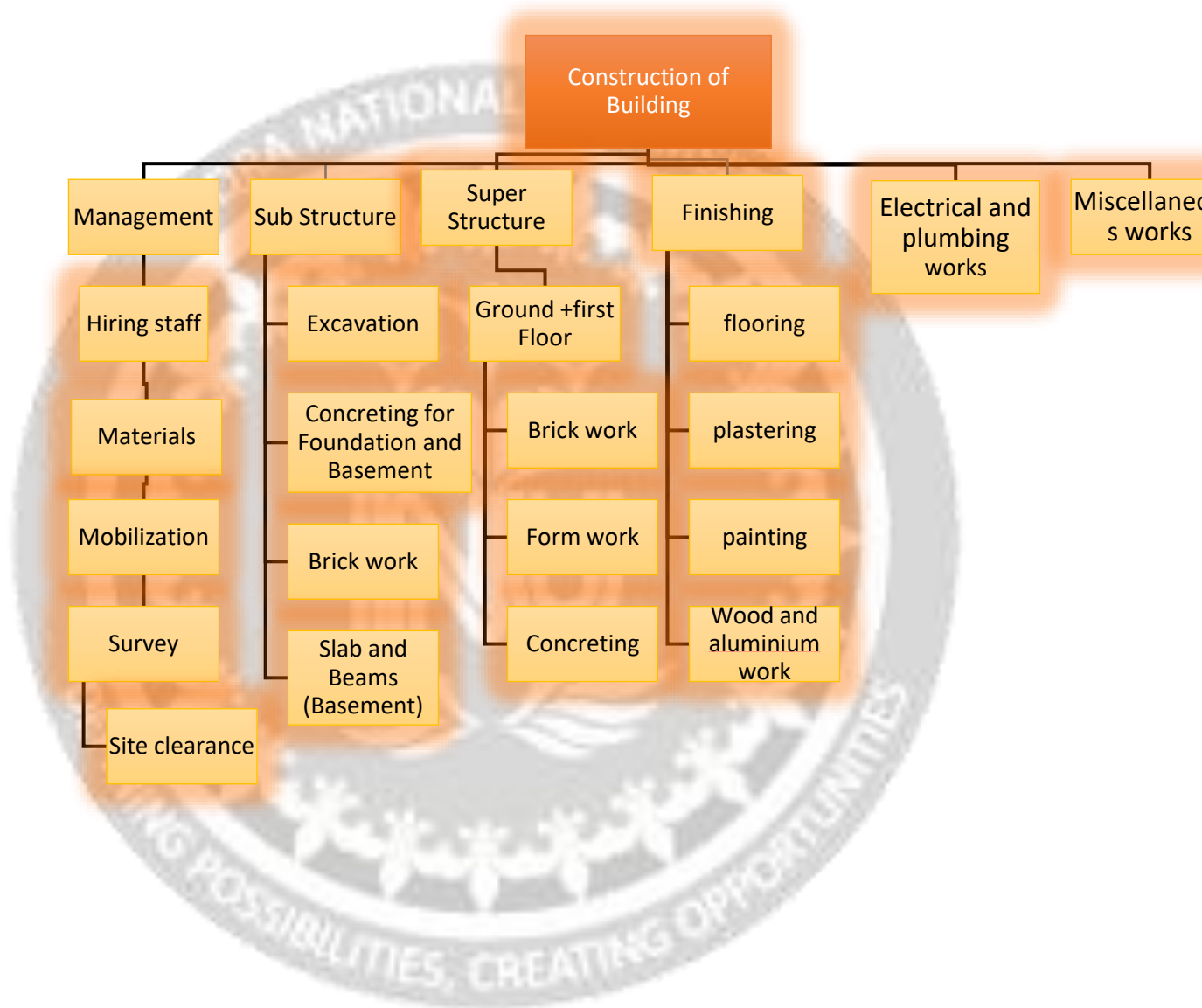
Following are the activities performed in the construction of house.

- a) Planning
- b) Survey
- c) Mobilization
- d) Layout
- e) Excavation
- f) Foundation
- g) Columns
- h) Slabs
- i) Brick walls work
- j) Sanitary fitting
- k) Flooring
- l) Finishing
- m) Wood work
- n) Electrification
- o) Miscellaneous



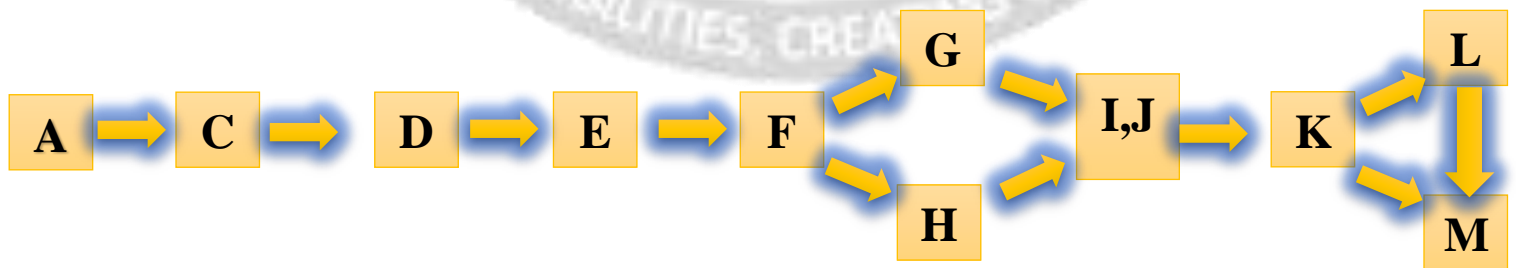


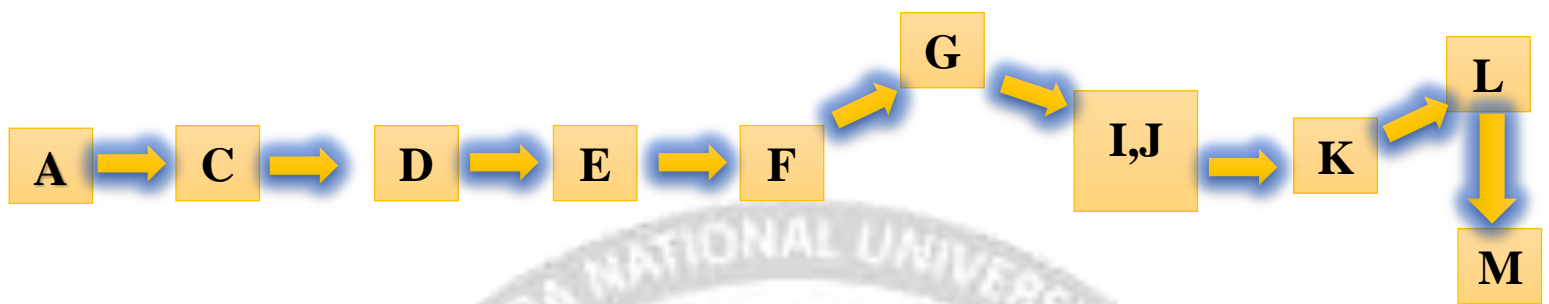
Work Breakdown structure of building:



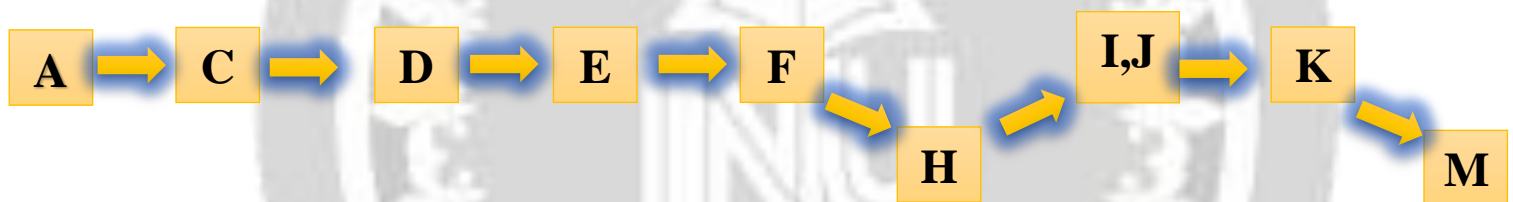
Critical Path Method:

Activities	Symbol	Predecessors	Duration in days
Survey	A		7
Mobilization	B		7
Grubbing of site	C	A	1
Layout And Excavation	D	C	4
Formwork	E	D	11
Foundation And Column	F	E	9
Concerting Of Beams And Slab	G	F	42
Brickwork	H	F	44
Plumbing And Sanitary Work	I	G,H	4
Electrification	J	G,H	8
Finishing	K	I,J	32
Flooring	L	K	10
Woodwork	M	K,L	14
Miscellaneous	N		10
Total days			203
Total Months			6.766666667





Path 1: A, C, D, E, F, G, IJ, K, L, M
 $= 7+1+4+11+9+42+4+8+32+10+14=142\text{DAYS}=4.733\text{MONTHS}$.



Path 2: A, C, D, E, F, H, IJ, K, M
 $= 7+1+4+11+9+44+4+8+32+14=134\text{DAYS}=4.466$

SO the critical path of the project is path “1” which is equal to 4.733 months.

→ **SLACK FOR THE PROJECT:**

Slack = late finish – early finish

$$A = 1 - 1 = 0$$

$$C = 8 - 8 = 0$$

$$D = 9 - 9 = 0$$

E = 13 - 13 = 0 and so on all values comes zero so no slack

Slack = late start – early start

$$A = 1 - 1 = 0$$

$$C = 8 - 8 = 0$$

$$D = 9 - 9 = 0$$

sE = 13 - 13 = 0 and so on all values comes zero so no slack

