
IQRA NATIONAL UNIVERSITY

CONSTRUCTION MANAGEMENT

QUIZ

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ID = 7775

SECTION = (A)

MODULE = 8th SEMESTER

INSTRUCTOR = DR.ENGR.MUHAMMAD ZEESHAN

(1)

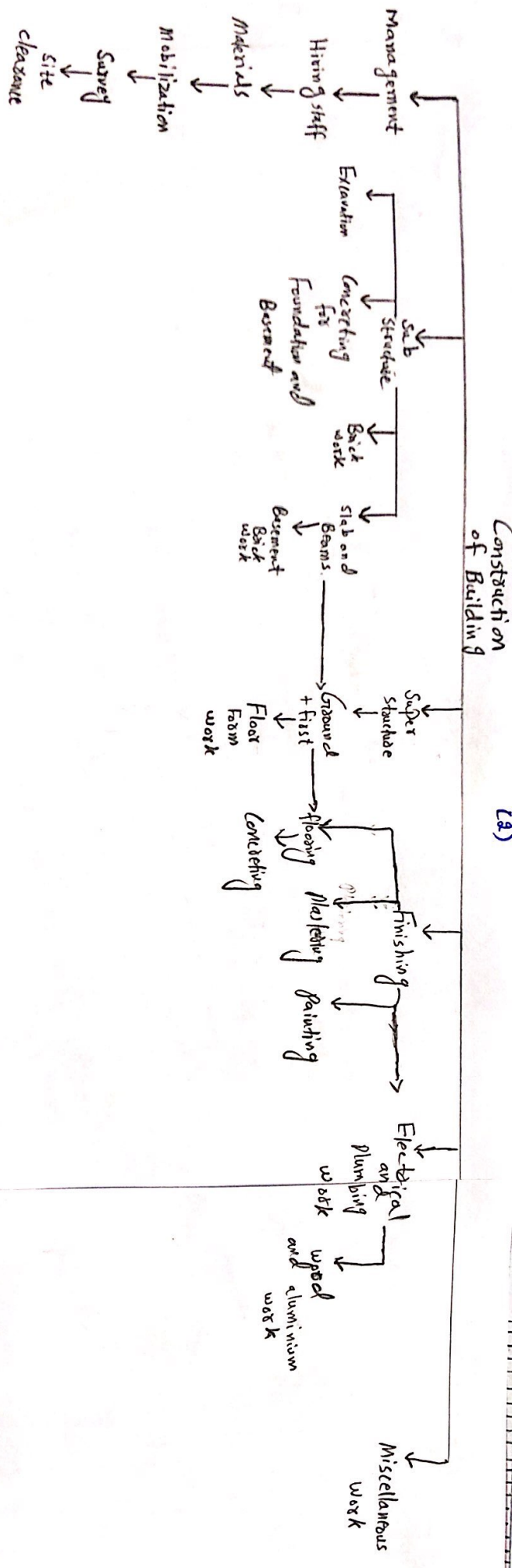
Construction Management

a) An activity list of a two storied building and a work breakdown structure for the project.

Ans: Activity list of a two story building

- 1) Survey
- 2) Mobilization
- 3) Grubbing of site
- 4) Layout and Excavation
- 5) Foundation and columns
- 6) Brick masonry walls
- 7) Formwork
- 8) Concreting (beams and slab)
- 9) Curing
- 10) Flooring
- 11) Wood work
- 12) Plumbing and sanitary work
- 13) Electrification
- 14) Finishing
- 15) Miscellaneous.

Work Breakdown structure of building



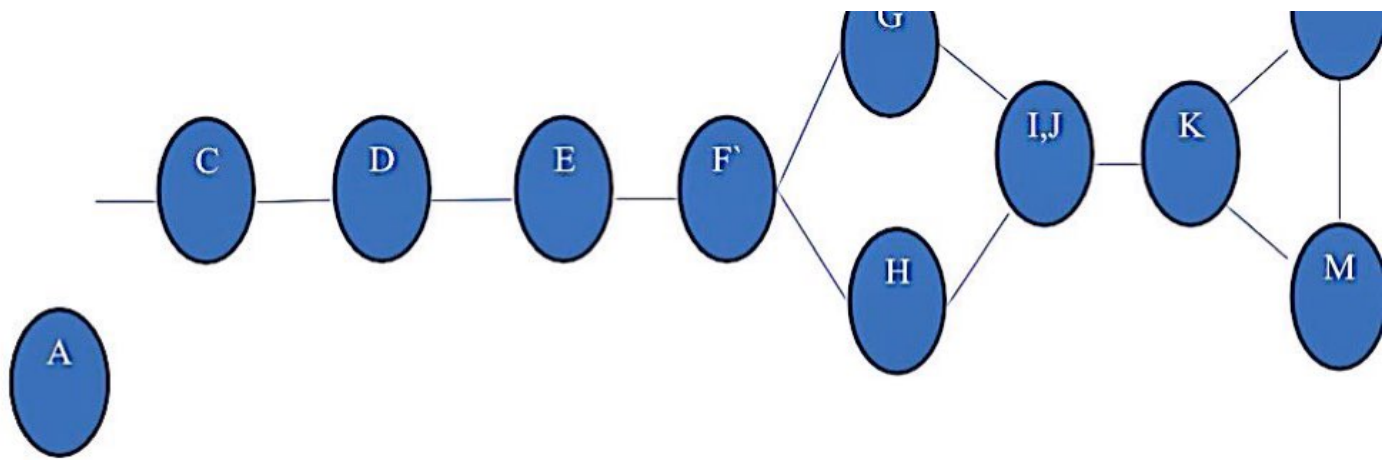
(4) ~~4~~

c) Prepare a critical path (CPM) of the project.

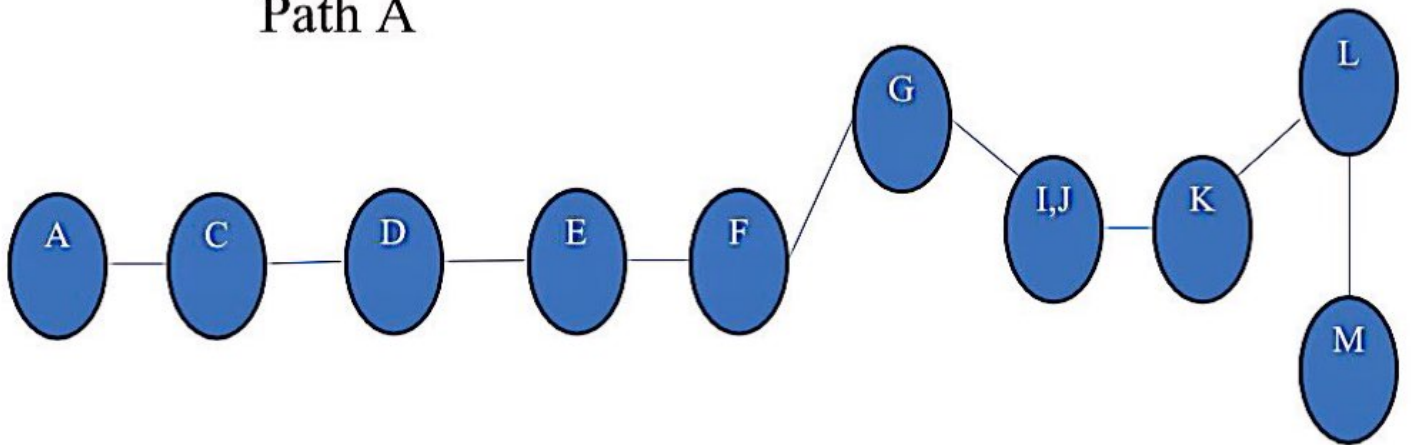
Ans- Critical Path method of the project

Activity		Predecessors	Duration in weeks
Survey	A		1
Mobilization	B		1
Grubbing of site	C	A	1
Layout and Excavation	D	C	2
Formwork	E	D	4
Foundation and column	F	E	3
Concreting (beams and slab)	G	F	3
Brick work	H	F	3
Plumbing and sanitary work	I	G, H	2
Electrification	J	G, H	2
Finishing	K	I, J	3
Flooring	L	K	2
wood work	M	K, L	3
Miscellaneous	N		3

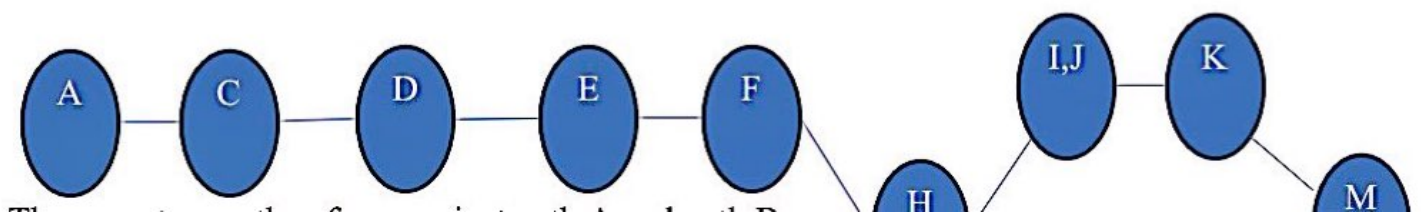
Precedence Diagram



Path A



Path B



(6)

These are two paths of our project path A and path B.

path A (A C D E F G I J K L M) having 26 weeks.

path B (A C D E F H I J K M) having 24 weeks.

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

(8)

(e) Provide which activities would have slack time.

Ans:

$$\text{Slack} = \text{late finish} - \text{early finish}$$

$$A = 1 - 1 = 0$$

$$C = 2 - 2 = 0$$

$$D = 4 - 4 = 0$$

$E = 8 - 8 = 0$ and so on all values comes zero.
So no slack.

$$\text{Slack} = \text{late start} - \text{early start}$$

$$A = 0 - 0 = 0$$

$$C = 1 - 1 = 0$$

$$D = 2 - 2 = 0$$

$$E = 4 - 4 = 0$$

And so on all values comes zero.
So no slack.