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Date:

No:

NAME = HAMZA KHAN

ID = 7782

SEMESTER = 8th

EXAM = Midterm

Subject = Construction Management

Instructor = Engr. Muhammad Zeeshan Ahmad.

a ACTIVITY LIST OF 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

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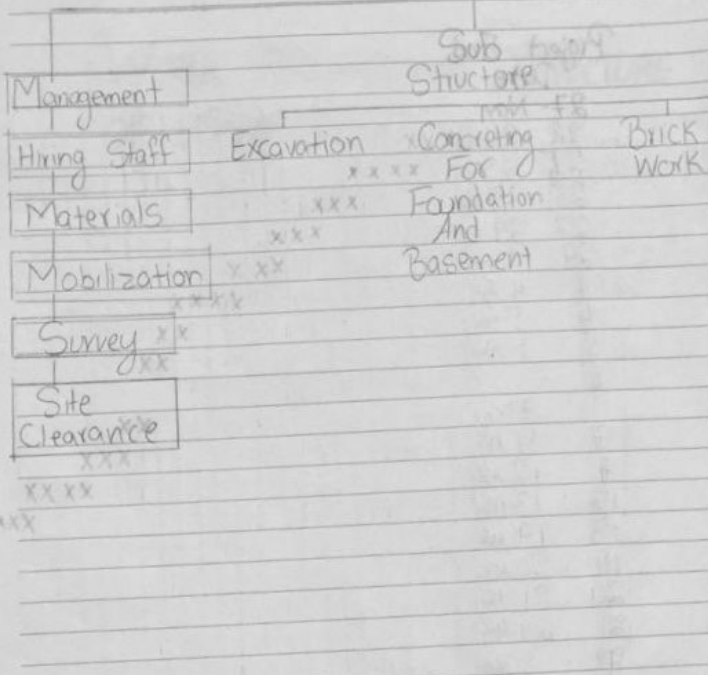
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- 14 Finishing
- 15 Miscellaneous

WORK BREAKDOWN STRUCTURE OF BUILDING:-

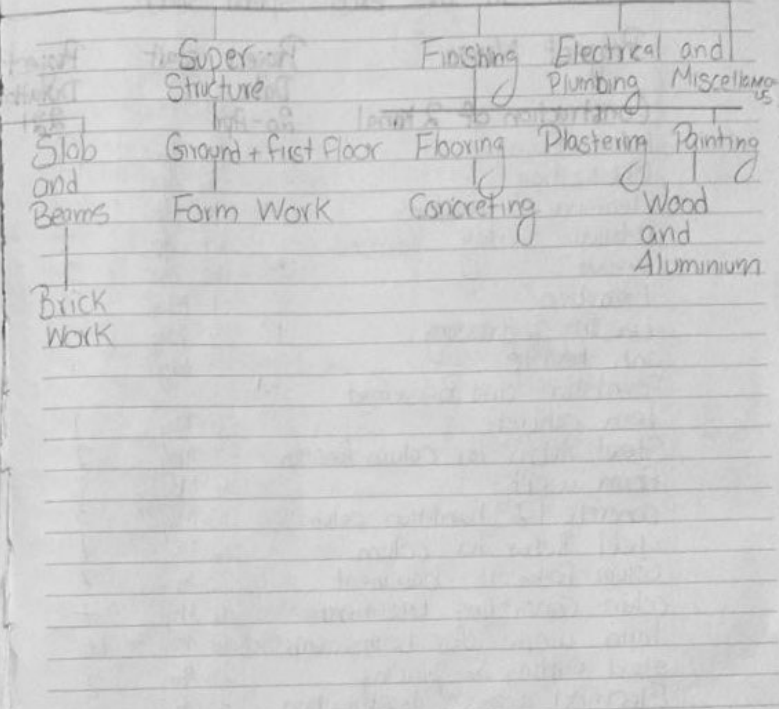
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(b)

Q2 Timeline of the project separately attached in the excel spread sheet.

Project NAME	Project start Date	Project End Date
Construction of 2 Kanal	20-Apr	22-Nov
Initial Survey	20-Apr	22-Apr
Mobilization	22-Apr	25-Apr
Clearance & grubbing	25-Apr	27-Apr
Detailed Survey	27-Apr	29-Apr
Layout	29-Apr	1-May
Excavation	1-May	4-May
Leveling & dressing anti kermit	4-May	5-May
Foundation and Basement	5-May	6-May
lean concrete	6-May	7-May
Steel Rebar for column foundation	7-May	9-May
Form work	9-May	12-May
Concrete 1,2,3 Foundation column	10-May	13-May
steel Rebar for column	12-May	19-May
Column formwork basement	13-May	20-May
column concreting basement	14-May	21-May
Form work for beams and slab	19-May	29-May
steel cutting & placing	29-May	3-Jun
Electrical up pipes distribution	3-Jun	5-Jun
Concrete 1,2,4 slab and beams	5-Jun	6-Jun
Form removal	29-Jun	3-Jul
Brick Masonry	4-Jul	3-Aug
Electrical & plumbing pipes	3-Aug	13-Aug
Plastering	3-Aug	23-Aug
Curing	13-Aug	31-Aug
Ceiling	31-Aug	10-Sep

(6)

		Date	No	
Planting	31-Aug	20	20	Sep
Sanitation work	10 Sep	5	15	Sep
Floor concreting	20 Sep	7	27	Sep
Tiles & marbles	27 Sep	15	12	Oct
Wood works	27 Sep	30	27	Oct
Electrical wire distribution	27 Sep	5	12	Oct
Sanitary fixtures	12 Oct	3	15	Oct
Ground Floor				
Layout	6 Jun	1	7	Jun
Steel cutting & placing	7 Jun	2	9	Jun
Form work	9 Jun	5	14	Jun
Concreting for column	10 Jun	6	16	Jun
Form work for beams	16 Jun	10	26	Jun
Steel cutting & placing	26 Jun	7	3	Jul
Electrical pipes	3 Jul	2	5	Jul
Concrete 1:2:4 slab & beam	5 Jul	1	6	Jul
Form removal	3 Aug	2	5	Aug
Brick masonry	5 Aug	15	20	Aug
Electrical & plumbing	20 Aug	5	25	Aug
Plastering	25 Aug	15	9	Sep
Curing	10 Jun	90	8	Sep
ceiling	8 Sep	5	13	Sep
painting	13 Sep	15	28	Sep
Sanitation work	8 Sep	3	11	Sep
floor concreting	11 Sep	3	14	Sep
tiles & marbles	14 Sep	15	29	Sep
Wood work	29 Sep	20	19	Oct
Electrical wire distribution	28 Sep	5	3	Oct
Sanitor fixtures	29 Sep	5	4	Oct

		No	
First floor			
Layout	6 Jul	1	7 Jul
Steel cutting & placing	7 Jul	5	12 Jul
Formwork	8 Jul	7	15 Jul
Concreting for column	8 Jul	7	15 Jul
Form work for beams	15 Jul	10	25 Jul
Steel cutting & placing	25 Jul	7	1 Aug
Electrical pipes distribution	1 Aug	2	3 Aug
Concrete 12.4 slab	3 Aug	1	4 Aug
Form removal	1 Sep	2	3 Sep
Brick Masonry	3 Sep	10	13 Sep
Electrical & plumbing	13 Sep	5	18 Sep
pipes distribution			?
Plastering	18 Sep	15	3 Oct
Curing	8 Jul	90	6 Oct
ceiling	3 Oct	7	10 Oct
Painting	10 Oct	15	25 Oct
Sanitation work	3 Oct	5	13 Oct
Floor concreting	8 Oct	5	2 Nov
tiles & marbles	13 Oct	20	22 Nov
Wood works	2 Nov	20	30 Oct
Electrical wire	25 Oct	5	27 Nov
Sanitary fixture	22 Nov	5	5 Aug

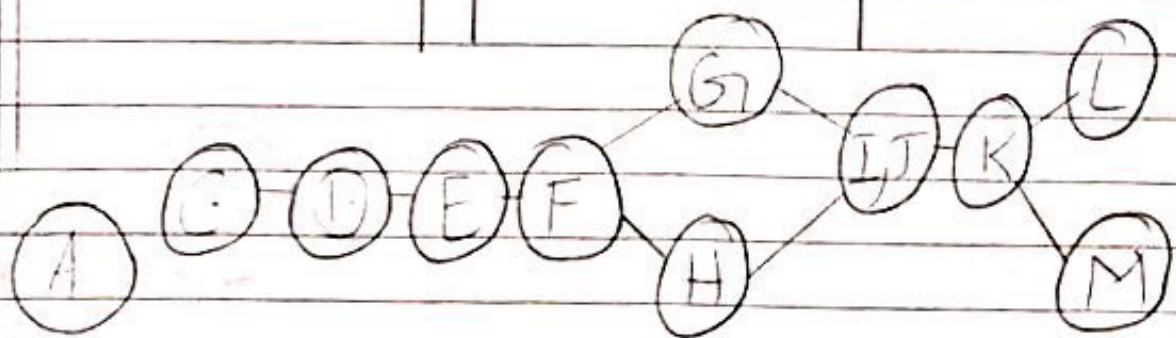
Mumty & terrace layout	4 Aug	1	5 Aug
Steel cutting & placing	5 Aug	1	6 Aug
Formwork	6 Aug	1	7 Aug
Concreting for column	7 Aug	1	8 Aug
Form work beams	8 Aug	1	9 Aug
Electrical pipes distribution	10 Aug	1	11 Aug
Steel cutting & placing	9 Aug	1	10 Aug
Concrete (1:2:4) slab	11 Aug	1	12 Aug
Form removal	9 Sep	1	10 Aug
Brick Masonry	10 Sep	3	13 Sep
Electrical & plumbing pipes distribution	13 Sep	1	14 Sep
plastering	14 Sep	3	17 Sep
Curing	7 Aug	45	21 Sep
Painting	17 Sep	3	20 Sep
Parapet wall	5 Aug	10	15 Aug
Bitumen	15 Aug	1	16 Aug
Mud roof	16 Aug	3	19 Aug
Chowka placing	19 Aug	5	24 Aug
Exterior works & Boundry wall	#		
Layout	26 Apr	2	28 Apr
Excation	28 Apr	7	5 May
Leveling & dressing	5 May	2	7 May
Anti Germite	7 May	1	8 May
lean concrete	8 May	3	11 May
Brick Masonry	11 May	14	25 May
DPC	25 May	2	17 Jun
Brick Masonry	27-May	21	27-May
Plastering	17-Jun	7	24-Jun
Painting	20-Sep	15	5-oct

Q3

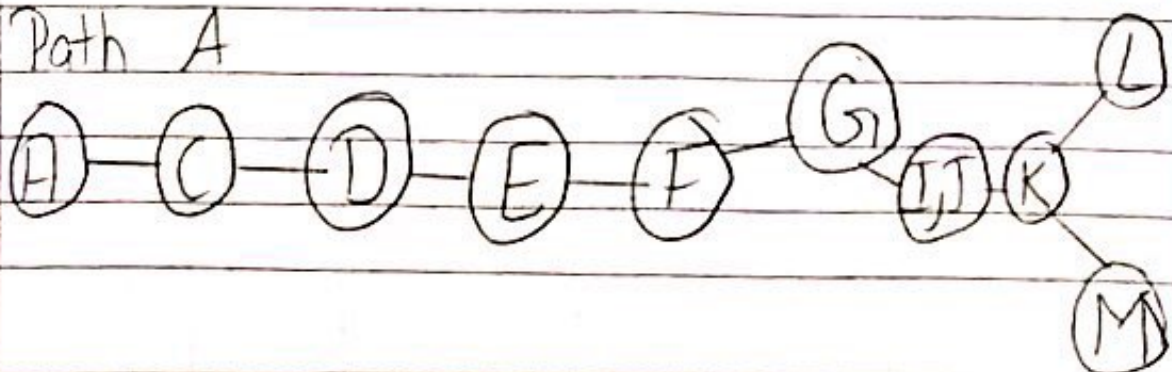
Critical path Method of the project

No.

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 (beams & slabs)	G	F	3
Brick work	H	F	3
Plumbing & Sanitary	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



Path A



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

Q5 Provide slack time for activities if

$$\text{Slack} = \text{Late Finish} - \text{early Finish}$$

$$A = 1 - 1 = 0$$

$$C = 2 - 2 = 0$$

$$D = 4 - 4 = 0$$

$E = 8 - 8 = 0$ and so 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 comes zero so no slack.