



University Of Technology  
Building and Construction Eng. Dept.  
Exam –FINEL- – 2015/2016

Subject : QUANTITY SURVYING Class:4

Branch : geomatics

Examiner :D.Raid AL-Lamy

Time : 3 Hours

Date :14 / 6 / 2016



**NOTE: Answer FIVE Questions ONLY**

**Q1-A-** Estimate the quantity of the following items for the reception in figure (1) and section 1-1 ? use the table in figure(2)

Tile work for the floor

Cement Plastering

Brick work up the DPC level ,

**Q1-B-** Draw the time program using ARROW NET WORK for the activities in the table below to find the critical path AND draw the BAR-CHART for the same ?

activity	A	B	F	J	I	H	C	E	G
DURATION	2	4	3	1	5	4	3	2	1
Depend up on	--	--	B	F H	E G C	E	A	A	C

**Q2-A-** What are factors affecting the accuracy of estimates?

**Q2 -B--** A-Estimate the quantity of the following items for the reception in fig (1) and section (1-1) ? use the table in figure(2)

1- Excavation for foundation

2- Subbase for under foundation

**Q3-A-** What are the props of prepare the estimate ?

**Q3-B -Give the pricing analyses for the concrete of the foundation in fig (1) DEPENDING ON THE FOLLWING INFORMATIONS?**

**INDIERECT COST10%&PROFIT 15%AND**

PRICE OF MATERIAL	cement 15000 ID/TON SAND 40000ID/M3 GRAEL 50000ID/M3 STEEL BARS 900000 ID/TON	
FEES OF labors	carpenter team consist of 1 carpenter 75000ID +2 unskilled labor 2500ID WHOSE PRODUCTIVITY ARE (20m3/day)  RENT OF MIXER250000ID/DAY WHICH PRODUCTIVITY25M3/day  reinforcement team(black smith 75000 ID + 2 unskilled labor2500ID ) 1.5T/DAY casting team(skill75000ID +8 unskilled labor2500ID) (15m3/day)	INDIERECT COST10% PROFIT 15% THE WAST PERSENT 5%
WEIGHT OF STEEL	$\phi 22 = 3.04\text{KG/M}$ , $\phi 19 = 2.25\text{KG/M}$	

**Q4-A- WHAT are the qualifications of an estimator?**

**Q4-B- Draw the time program using precedence method for the activities in the table below to find the duration of project and critical path?**

activity	A	B	C	D	E	F	G	H	K	L
DURATION	4	2	2	6	6	1	1	2	5	3
Depend up on	---	A	B F	C L	D G H	A	F	G L	A	F K

**Q5-A- What are the advantages of unit price contract & ~~COST PLUS CONTRACT?~~**

**Q5-B- Find the total time for the project according to the items below by using the flow chart method?**

Activities	Duration	Precedence by
A	1.5	-----
B	1.5	A
C	2.5	A
D	1	B

**Q6-A- Draw the arrow net for the activities in the table below ?**

activities	2-4	2-6	2-8	4-10	6-10	8-12	10-12	12-16	14-18	16-18	18-20
duration	2	3	2	5	0	3	0	2	2	2	3

10-14  
2

**Q6-B- Define the following :**

**Project - planning – Directing- estimate**

ITEM NO	Description of item	UNIT	NO	LENGTH	WIDTH	HIGH OR THICKNESS	QUANTITY

FIG (2)

Flow net  
arrow

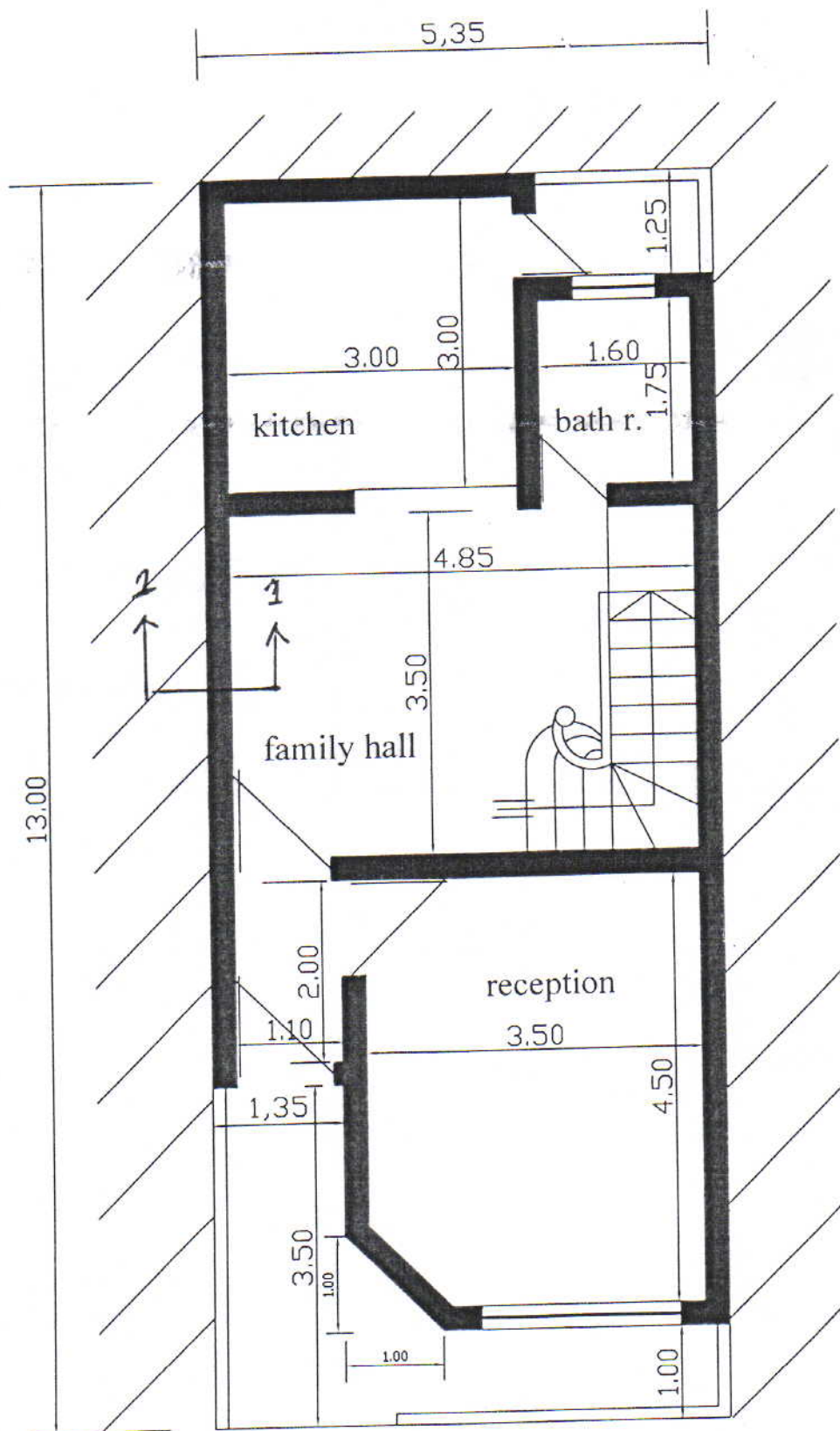
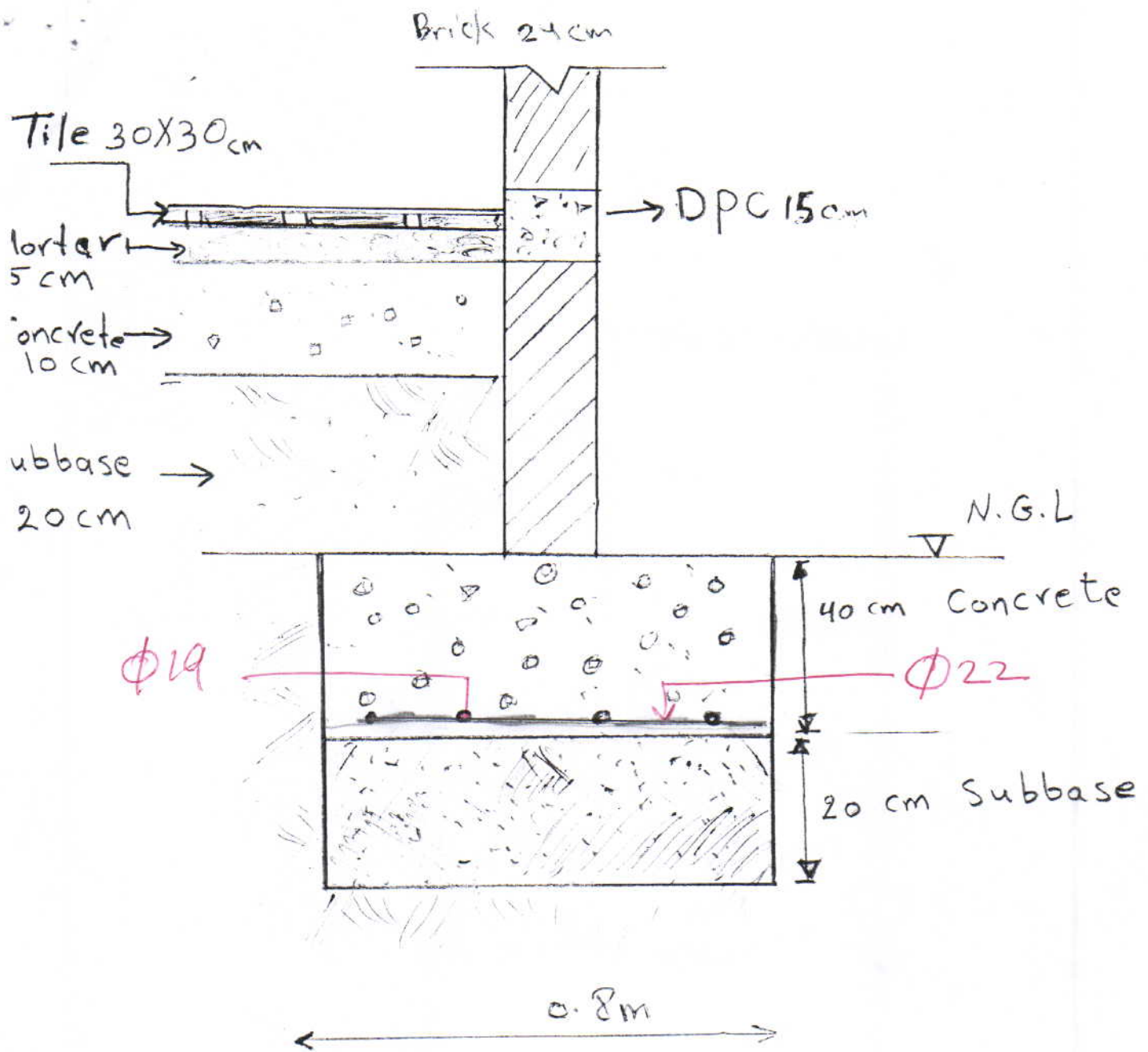


figure no.1



sec 1 - 1

Fig (2)

③

Q5-A

- 1- Complete design definition not required
- 2- Typical drawings can be used for bidding
- 3- Easy for contractor selection
- 4- Suitable for competitive bidding
- 5- flexibility.

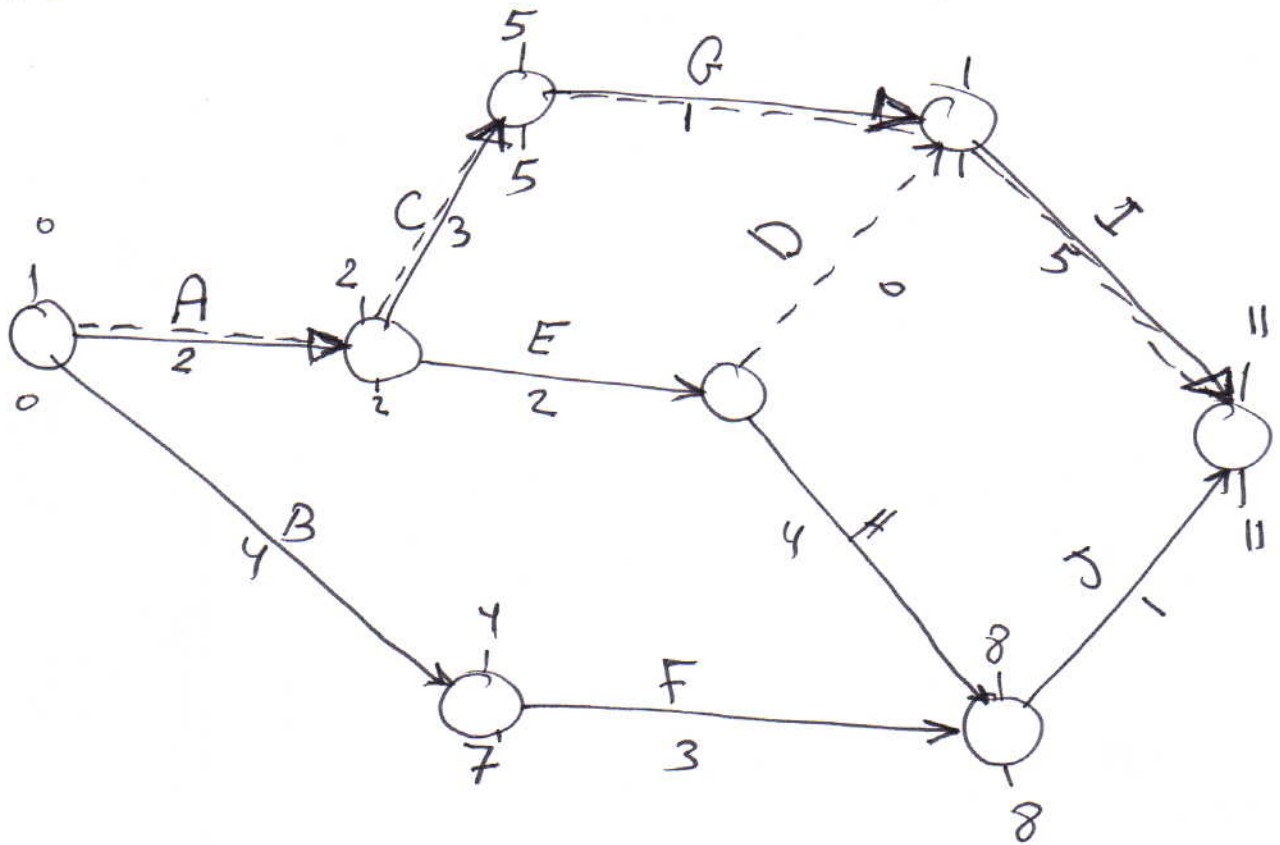
Q5B Ans

item	1	2	3	4	5	6
A	—					
B		—				
C		—	—			
D			—			



Answer.

Q1-B



C.P = A - C - G - I

	1	2	3	4	5	6	7	8	9	10	11	12							
A	—	—																	
B	—	—	—	—															
C			—	—	—														
D			—	—															
E					—	—	—	—											
F					—	—	—	—											
G						—	—	—											
H						—	—	—	—										
I										—	—	—							
J										—	—	—							

① الادارة وصنع كى - جوماتك - المرحلة الرابعة

Q2 - A Ans

- 1- توفر المخططات
- 2- مهارة المصمم
- 3- دقة المخططات
- 4- توفر الاسعار
- 5- توفر المواصفات
- 6- اى ملائمات او عوامل - اخرى ملائمة

Q3 A Ans

يكون تفهيم للاعمال الانشائية من المقام تفهيم  
هذه المصطلحات لشيء مفهومة باللقطة اللازمة  
للمشروع بصورة تفصيلية اى تكون الكلفة تقديرية  
من الكلفة الحقيقية التي لا يمكن معرفتها بصورة  
كافية الا بعد اكمال المشروع ونتجيب المعروفات  
بـ

Q4 - A Ans

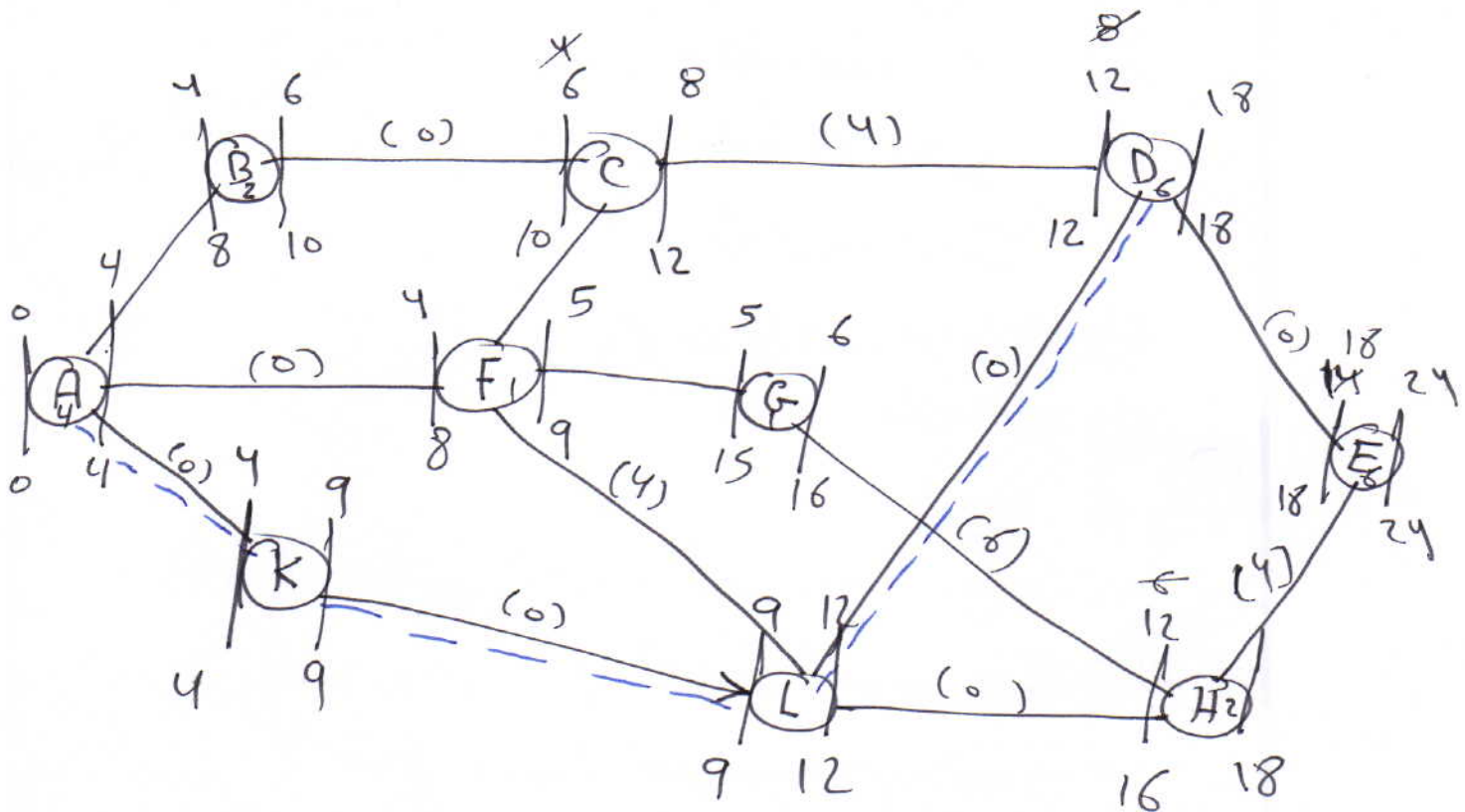
- 1- A thorough understanding of architectural drawings.
- 2- A sound knowledge of Building Materials.
- 3- A fund of information collected through experience in construction work
- 4- An understanding of a good method of preparation

an estimate

(2)

5 - Ability to collect, classify and evaluate

P4.B Ans



Duration = 24

C.P = A - K - L - D - E