

Course Title: Project Management (0906522)	Mid Exam	Student Name: XXXXXXXXXX
Semester : First semester 2014/2015	Date: 13/11/2014	Registration number: XXXXXXXXXX
Course Instructor: Dr. Lina Al-Qatawneh		

Q1 (15 Marks)

1	Process Breakdown structure. Padding estimates
2	Padding estimates
3	delevering
4	milestones.
5	Apporition.
6	direct overhead cost.
7	Priority matrix
8	normal
9	Laddering
10	the project.
11	hammock.
12	scope creep.
13	406 ✓
14	11.6 month = 11 month 18 days
15	\$46400

Q2 (10 Marks)

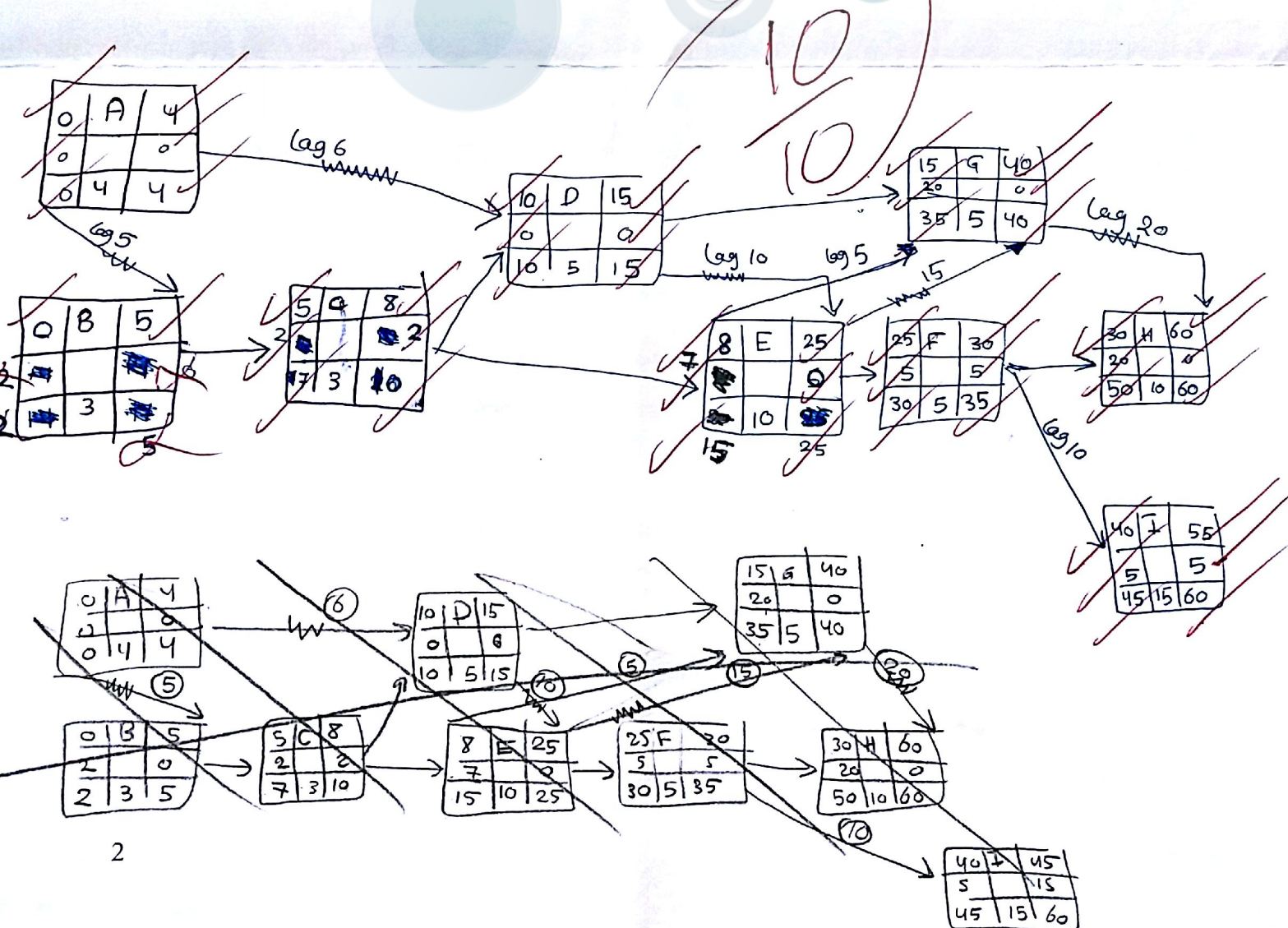
1	T
2	F
3	F
4	F
5	T
6	F
7	F
8	T
9	F
10	T

Q3: (10 marks)

- Use the information in Table 1 to draw the project network using the activity-on-node approach.
- Complete the early, late, and slack times for each activity.
- Identify the critical path (draw blue zigzag on the critical path).

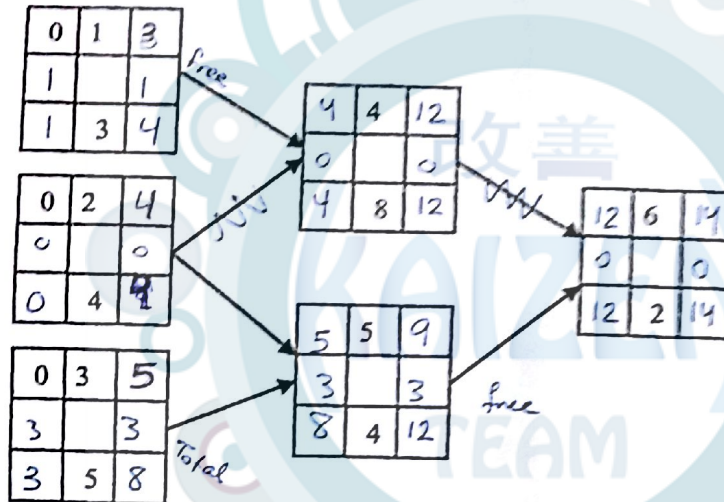
Table 1

ID	Duration	Finish-to-Start predecessor	Finish-to-Start lag	Additional relationships	lag
A	4	None	0	Start-to-finish A to B	5
B	3	None	0	None	0
C	3	B	0	None	0
D	5	A	6	Finish-to-finish D to E	10
E	10	C	0	Start-to-start E to G	5
F	5	E	0	Finish-to-finish E to G	15
G	5	D	0	None	0
H	10	F	0	Finish-to-finish G to H	20
I	15	F	10	None	0



- a) Develop a resource schedule in the loading chart that follows. Use the parallel method and the following heuristics:
- Minimum slack
 - Smallest duration
 - Lowest identification number

Note: four of the resource skills are available.



ID	RES	DUR	ES	LF	SLK	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1	3	0	4	1		1	1	1												
2	3	4	0	4	0		3	3	3	3											
3	2	5	4	9	2		X	X	X	X	2	2	2	2	2						
4	2	8	4	12	0						2	2	2	2	2	2	2				
5	1	4	5	9	3						X	X	X	X	1	1	1	1			
6	3	2	12	14	0													3	3		
Resource scheduled						4	4	4	3	4	4	4	4	4	3	3	3	1	3		
Resource available						4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

8/10

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عمان

改善

KAIZEN
TEAM

رقمه الجامعي

الكلية

المادة

العلامات

اسم الطالب

المستوى

القسم

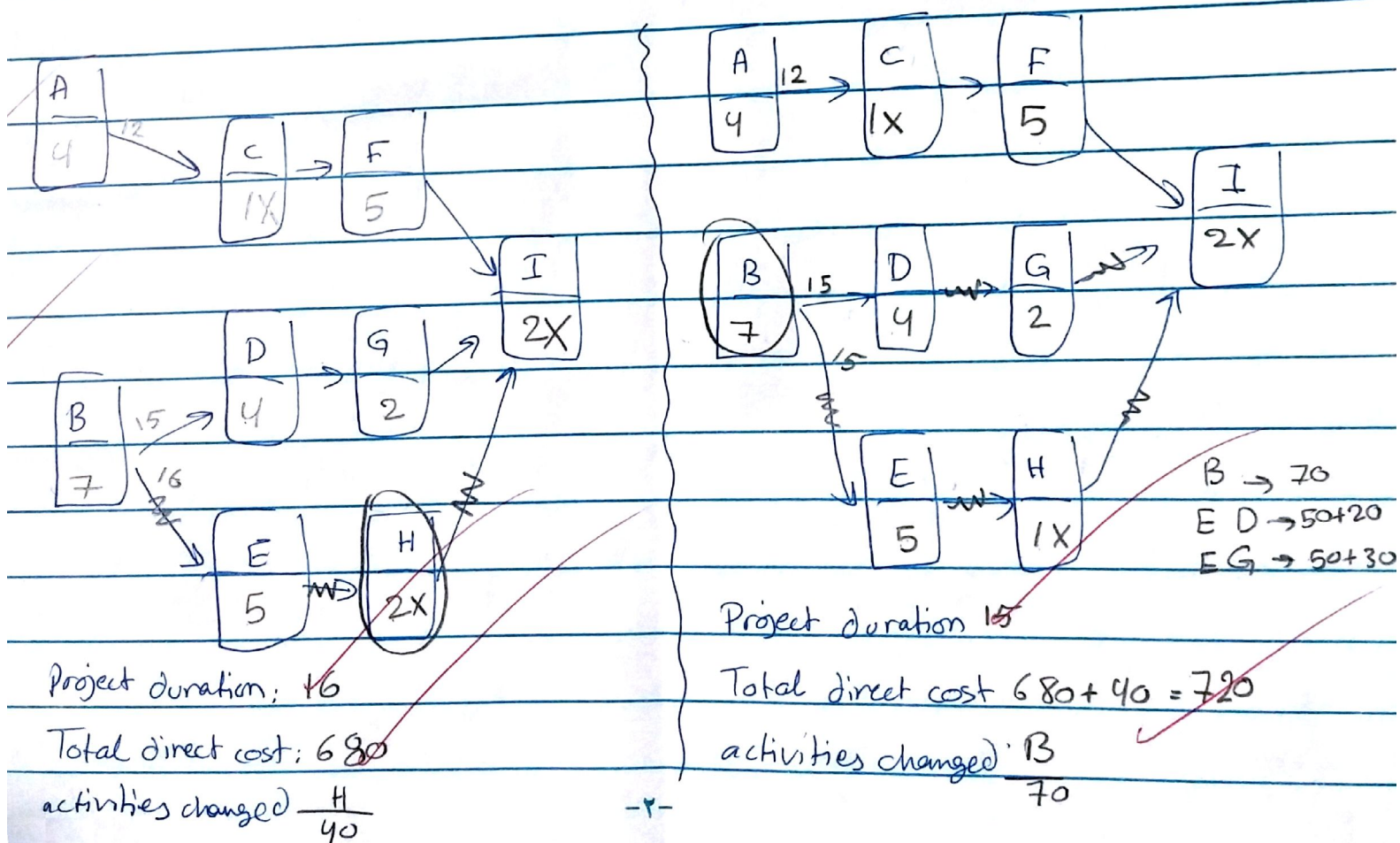
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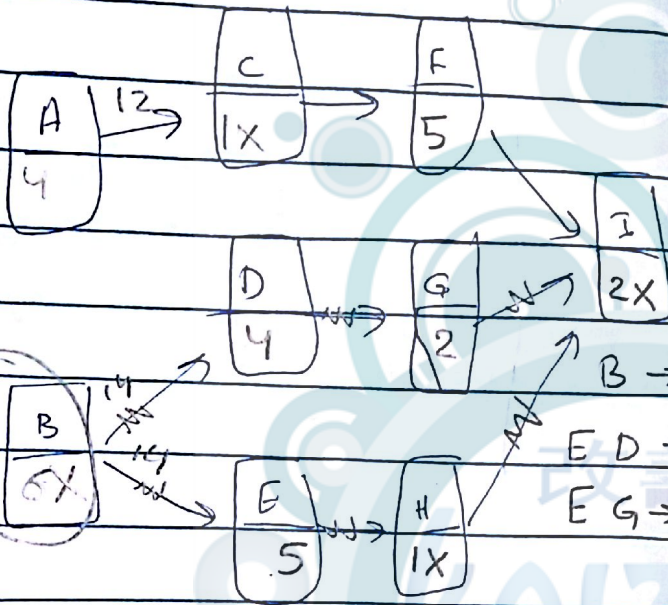
PM

9
10

Id	crash cost	Maximum crash time	Normal time	Normal cost
A	10	1	4	30
B	70	2	7	60
C	0	0	1	80
D	20	2	4	40
E	50	3	5	110
F	200	3	5	90
G	30	1	2	60
H	40	1	2	70
I	0	0	2	140
				680

if the initial cost for each duration are \$1200 for 16 weeks, \$1130 for 15 weeks, \$1000 for 14 weeks, \$900 for 13 weeks, \$860 for 12 weeks, \$820 for 11 weeks & \$790 for 10 weeks, compute the total costs for each duration. Plot these costs on a graph, what is the optimum cost-time schedule.



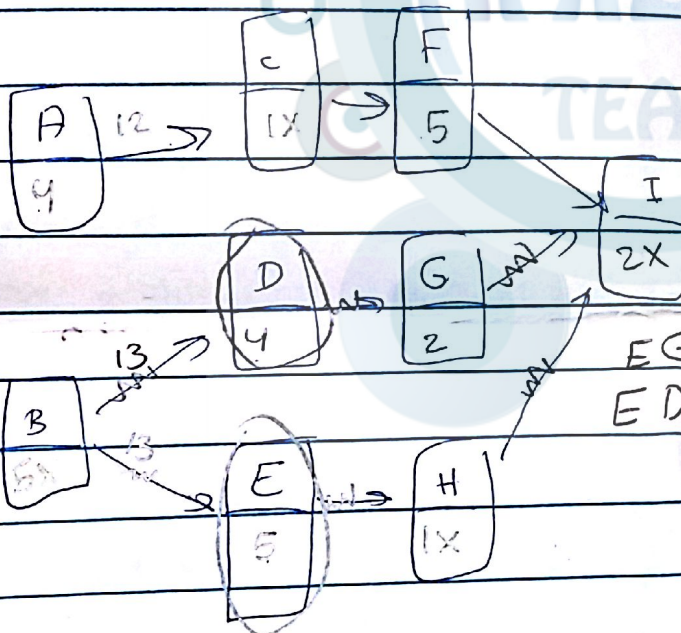


Project duration 14

Total direct cost $720 + 70 = 790$

Activities changed B
70

$B \rightarrow 70$
 $ED \rightarrow 50 + 20$
 $EG \rightarrow 50 + 30$

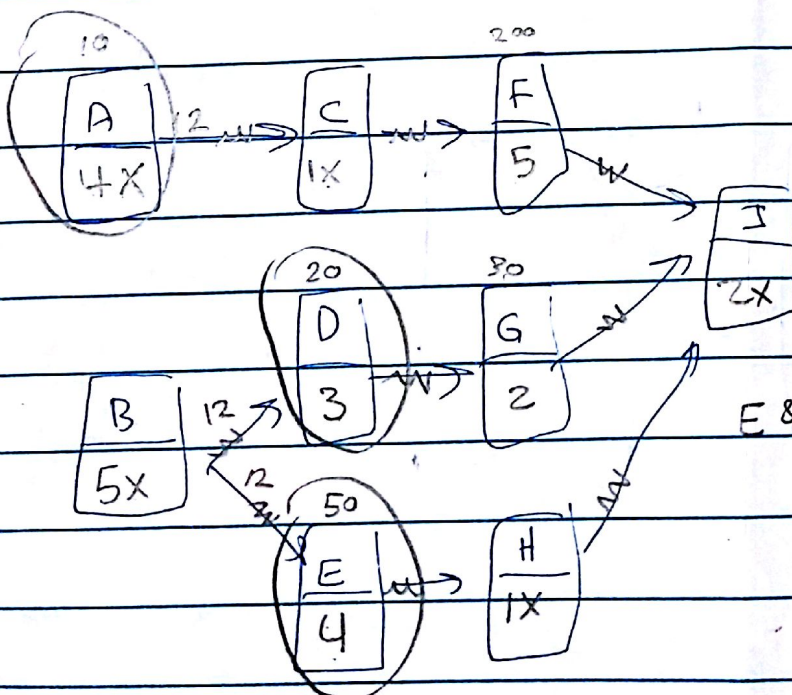


Project duration 13

Total direct cost $790 + 70 = 860$

Activities changed E D
50 20

$EG \cdot 50 + 30 = 80$
 $ED \cdot 50 + 20 = 70$

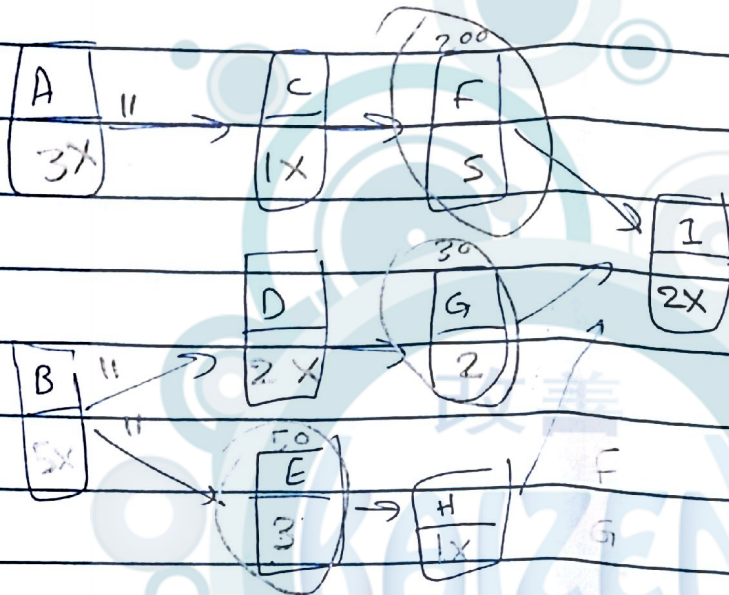


Project duration 12

Total direct cost $860 + 70 = 930$

Activities change E D A
50 20 10

E & D & A



Project duration 11

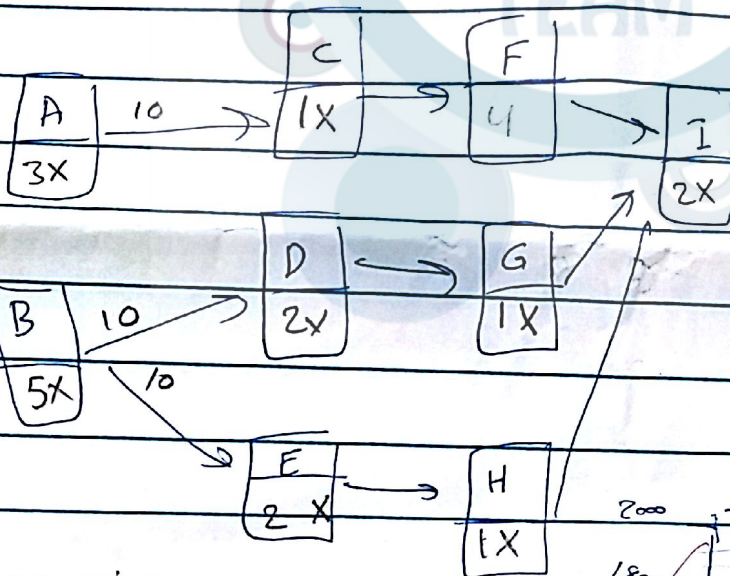
Total direct cost $930 + 80 =$

Activities changed ~~1100~~

F G E

200 30 30

280



Project duration 10

Total direct cost $1100 + 280 =$

Activities ~~duration~~ **1380**

total

the best time = **13** weeks

with cost of \$1760

dur	Direct cost	indirect cost	Total
16	680	1200	1880
15	720	1130	1850
14	790	1000	1790
13	860	900	1760
12	930	860	1790
11	1100	820	1920
10	1380	790	2170
			1380
			790
			2170

