



Question 1: For the next table answer the following questions (15 marks)

		Markets (Destinations)		Supply
		Denver	Miami	
Pl a n t	L.A.	X_{11} 80	X_{12} 215	1000
	Detroit	X_{21} 100	X_{22} 108	1500
	New Orl.	X_{31} 102	X_{32} 68	1200
	Demand	2300	1400	

- 1- Using NW method, starting point is
 - a- X_{11}
 - b- X_{23}
 - c- X_{13}
 - d- None of the above
- 2- In the third we move, the point is
 - a- X_{12}
 - b- X_{23}
 - c- X_{32}
 - d- None of the above
- 3- The transportation cost is
- 4- Using LCR method starting point is
 - a- X_{11}
 - b- X_{23}
 - c- X_{31}
 - d- None of the above



5- After 2 elimination the least point is

- a- X11
- b- X12
- c- X21
- d- None of the above

6- The TC is

Question 2: X,y and z are brands, and their moving needed to be calculated, if

$P(yx)$ is twice the $P(zx)$ (10 marks)

$P(xx)=0.7$;

$P(xy)$ is four times $p(zy)$

$P(yy)=0.5$

$P(zx) = 0.3$

$P(yz)=0.6$

Answer the following

7- $P(yz)$

- a. 0.2
- b. 0.22
- c. 0.3
- d. None of the above

8- $P(zz)$

- a- 0.6
- b- 0.65
- c- 0.7
- d- None of the above

9- After 2 periods how many brands will be at y, (starting from z)

10- After 1 period how many will be at z (starting from z)

اسم المحاضر: م. منير أبو غلوة
 رقم الطالب: _____
 اسم الطالب: _____
 الكلية: إدارة المال و الأعمال
 القسم / التخصص: _____
 استخدام المعاجم أو القواميس (لا)

جامعة فلسطين



الامتحان النهائي
 الفصل الدراسي الثاني
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 استخدام الآلة الحاسبة (لا)

Question 3: For the following table answer the following (10 marks)

	The maximum Criterion				
Decisions	Large rise	Small rise	No change	Small fall	Large fall
Gold	-100	100	200	300	0
Bond	120	200	150	157	-120
Stock	150	250	167	123	-60
C/D	220	120	220	122	-157

11- Using the maximini Criterion the best solution is

- a- 120
- b- -60
- c- -157
- d- None of the above

12- Using the maximax criterion the best solution is

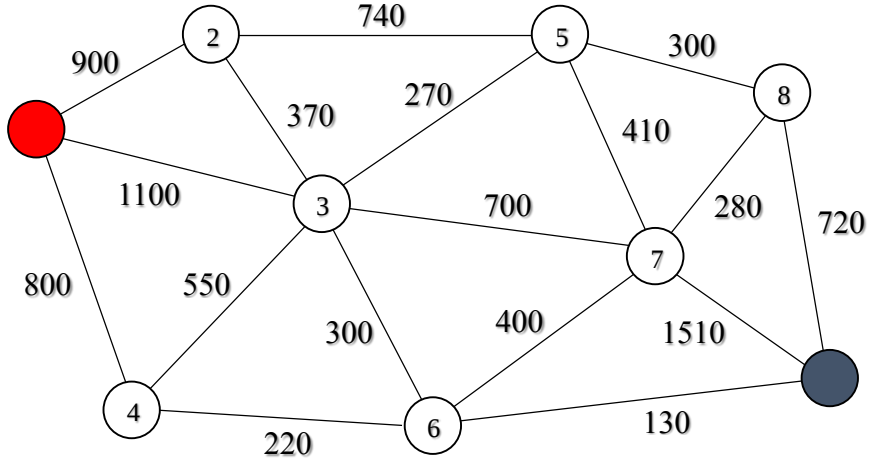
- a- 300
- b- 200
- c- 250
- d- None of the above

13- If the probability of each criterion is (0.2),(0.3),(0.1),(0.1) respectively, find the EVPI.



Question 4

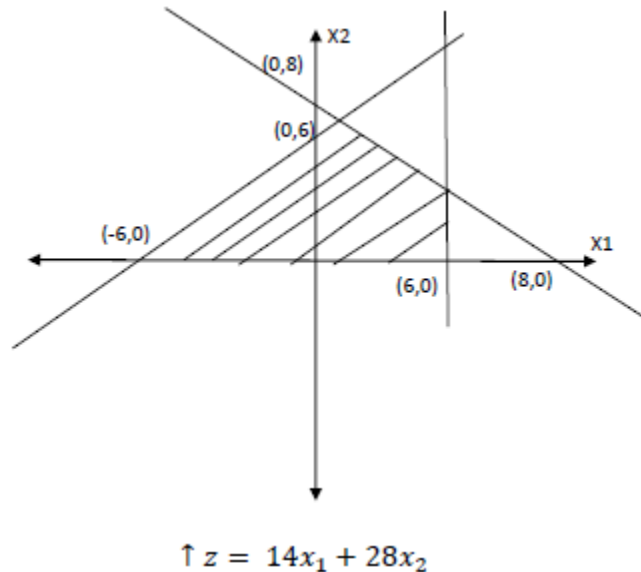
10 marks



Draw the minimal spanning tree.

Question 5 (15 marks)

For the following diagram



Write the full math model, and find the optimal solution
(hint: straight line equation is $y - y_1 = m(x - x_1)$ where m is the slope)