Faculty of Eng.& Tech.
Shebin El-Kom
End-of Second Semester Exam.
Date: 6 - 6 - 2018



Dept.: Electric

Subject:

Economy &

Project Management Time Allowed: 2 hrs.

Answer the Following Questions:

Question No. [1]:

(10 Marks)

a-Define the following:

1-Inflation

2-A cost

3-Forecasting

4-Cash flow diagram

5-Replacement of machines

b- A person invested a sum of 6000 L.E. now 4000 L.E after two years, and 5000 L.E after 5 years. If rate of compound interest of 10 % annually: how much should he earn at the end of the seventh year.

Question No. [2]:

(15 Marks)

a-A person bought an electric generator for 25000 L.E from 5 years ago. He rents this generator. The annual rental income from the generator has been 6000 L.E Additionally, the 800 L.E spent on maintenance during the first year has increased each year by 200 L.E. The person plans to sell the generator at the end of next year for 15000 L.E Construct the net cash flow diagram.

b-Given below is the series of monthly demand for a product

Months	1	2	3	4	5	6	7
Sales, units	96	101	110	90	100	98	110

Use the regression analysis to forecast the sales for month 8.

Question No. [3]:

(15 Marks)

a-List the reasons for depreciation?

b-What are the factors affecting depreciations?

c- You are given the following data for a factory:-

- produced quantity (output)

= 100000 units

- Variable cost per unit

10 L.E

- Fixed costs

= 500000 L.E

- Selling price per unit

20 L.E

Draw a break -even chart and profit -loss chart, showing the break- even point. If the selling price per unit is reduced to 18 L.E, what will be the new break-even point in units?

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Activity	Immediate predecessor	Expected time te	Optimistic time	Most likely time m	Pessimistic time b
A	-	5	4	5	6
B	-	3	1	3	5
C	A	2	□ 2	2	2
D	A	4	3	4	
E	В	9	7	8	15
F	C	2	1	2	3
G	D,F	1	1	1	1
H	G	7	6	6	12
I	E,H	2	1	2	3

Assume a project completion time of nineteen days after the project begins. From the above data, perform the following:

a-Draw the PERT network ,labeling activities, and compute ES,EF,LS and LF. b-Determine the critical path as well as the total slack and free slack.

Good luck

Exam . Matrix

	This exam. measure	es the following ILOS	S	
Question No.	Q1,Q2	Q4	Q3	
Skills	a 7	b9	c1	
, , , , , , , , , , , , , , , , , , ,	Knowledge&Understa nding skills	Intellectual skills	Professional skills	

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