المَادة: علم الاقتصاد شهادة الثانوية العامَة فرع الاجتماع والاقتصاد نموذج رقم 6 - انكليزي المدَة : ثلاث ساعات	الهيئة الأكاديميّة المشتركة قسم الاجتماع والاقتصاد	المركز النزيوي ليبحوث والانجمار
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نموذج مسابقة (يراعي تعليق الدروس والتوصيف المعدّل للعام الدراسي 2016 – 2017 وحتى صدور المناهج المطوّرة)

# **<u>Obligatory Part One:</u>** Using Economic Concepts and Techniques (8 points)

1. Specify three principles adopted by the Classical liberal system and that each of which contributes in achieving one of the following results: (0.75 point)

1.1 Creativity and innovation

1.2 Enhancing competition

1.3 Promoting international competition

2. In the framework of developing their capabilities and qualifying them to receive managerial positions in new branches of the company, the sales manager of the company delegated part of his/her authorities to three employees without taking the approval of the general manager. In the course of carrying out the tasks assigned to them, one of the employees committed mistakes resulted in financial losses to the company.

As a result, the general manager decided to lay off the sales manager and deducted five days of the salary of the employee who committed the mistake without consulting one of the managers or supervisors.

2.1 Deduce the motivational type adopted at the beginning by the Sales manager. Justify your answer. (0.5 point)

2.2 specify the direct person in charge of the mistakes committed by the employee. (0.25 point)

2.3 Name the leadership pattern of the general manager while relying on Blake/Mouton gird/managerial grid. Justify your answer. (0.5 point)

3. The liberal countries pass through a series of fluctuations each of which constitutes an economic cycle. Copy the following table on your answer sheet; then, complete it with the appropriate answers. (2 points)

Case	Stage	Reason	Direct Result
Reduction in demand on loans issued		Increase in interest	
for investment		rates on loans	
Economic enterprises reduce			Dismissal of workers
production levels			or unemployment

4. The marginal costs of an economic enterprise were distributed according to the following:

<b>Production Level</b>	<b>Fixed Cost</b>	Marginal Cost	<b>Total Cost</b>	Average Cost
0				
10		50		
20		10		
30		7.5		
40		4.5		
50		3		
60		21		
70		37		

The fixed cost amount to 200 mu.

4.1 Copy the above table on your answer sheet; then, calculate the total cost and average cost at each production level showing the necessary calculations. (1.5 points)

4.2 Specify the production level at which the enterprise achieves maximum profit in case the per-unit market selling price is 3 mu. Justify your answer. (0.5 point)

5. An investor has the following two options:

1<sup>st</sup> option: establishing a project to produce shoes; the investment cost of this project amounts to 50,000 mu and the selling price of one shoe amounts to 20 mu. As for the yearly costs, they are distributed according to the following:

- Total fixed cost = 1000 mu
- Variable  $\cos t = 7,000$  mu
- Average cost at maximum production capacity = 16 mu

 $2^{nd}$  option: Depositing an amount of 50,000 mu in a commercial bank with a yearly simple interest rate in a way that he/she gets a financial return worth 4,500 mu at maturity date (after one year).

5.1 Calculate the maximum production capacity of the project. (0.5 point)

5.2 Calculate the production level that achieves break-even and its representing percentage

5.3 Calculate the profitability rate of the investment. (0.5 point)

5.4 calculate the interest rate. Then, specify the most suitable option for the investor justifying your answer. (0.5 point)

#### Choose one of the following two sets

# First Optional Set: Analyzing Economic Documents (12 points) **Document no.1:**

(....) Al-Huwayk notes that "what contributes to hitting the seasons is that the agricultural marketing faces a major problem as the farmers is selling their production to merchants "on consignment" to get their profit after selling it, without forgetting the deduction of the wholesaler's commission. Also, there is also no clear mechanism for the export process." He added that "the proportion of exports decreased by 30% from the rate achieved by the agricultural sector in the previous two years .... Lebanon produces a range of products intended for export and domestic consumption alike. The Lebanese agricultural exports are concentrated in the Arab countries, especially in the Gulf region (...)"

(...) The Lebanese farmers are the only category in Lebanon that the State does not ensure social security, or even voluntary support; in addition to the lack of provision of soft loans. Agriculture in Lebanon accounts for between 20% and 30% of the total employment in the country. The size of the beneficiaries of this sector is estimated to be 1 million and 200 thousand citizens; that is equivalent to about 25% of the total population. The cultivated areas account for 82% of the total area of arable land. المصدر: الأخبار 8 تشرين الأول 2014

## **Document no.2:**

2008	2009	2010	2011	
48,117	53,075	57,3	58,436	
2,007	2,114	2,205	2,360	
Percentage of agricultural output from GDP 4.17% 3.98% 3.85% 4.04%				
	48,117 2,007	48,11753,0752,0072,114	48,11753,07557,32,0072,1142,205	

Real GDP (in billion Lebanese Pound)

المصدر :إدارة الإحصاء المركزي (Chain-linked GDP by activity at constant Prices) (بنصرف)

## **Document no.3:**

(....) The richness and diversity of the agricultural system is threatened today ... Moreover, the agriculture has a significant positive or negative impact on water, biodiversity, pollution and landscapes through the space it occupies and the technologies it uses. Due to the importance of the matter, the Ministry of Agriculture has established a special department dedicated to the conservation of natural resources, biodiversity and the environment, and has been managed in a sustainable manner; water management and investment, aquaculture, fisheries, forests and pastures have been integrated in a sustainable manner,. The aim is to encourage the management and sustainable investment of natural resources, avoid their waste and ensure their availability for future generations, which will be and will continue to form natural resources in Lebanon.

(...) In addition, the agriculture is considered one of the pathways of social justice through its basic position in rural development, and through its public service framework and its participation in fighting against poverty. The agricultural sector in Lebanon is still the most important ways of living and main source of income and employment in rural areas. The experiences of several countries have shown that GDP growth from agriculture has double effectiveness in reducing poverty; thus contributing to social stability, compared to GDP growth from other sectors

The growth of agriculture in rural areas will increase the demand for other sectors such as rural services, transport, telecommunications and others. The agriculture sector is therefore an incentive to create jobs in a range of relevant fields. The agricultural survey reports for 2010 indicated that the number of farmers with an average age of 52 years reached about 170,000, half of which depends only on the agricultural activity with no additional economic activity. (...)

المصدر: الأنباء 8 نيسان 2016 (استراتيجية وزارة الزراعة للأعوام 2015-2019)

## Referring to the documents above, answer the following questions:

1.1 Extract from document no.1 the two problems facing the agricultural marketing in Lebanon. (0.25 point)

1.2 Mention the effect of these two problems on the Lebanese society. Show the logical link between each of the problems and the result. (1.75 point)

2. It is mentioned in document no.1 "The Lebanese farmers are the only category in Lebanon that the State does ensure social security, or even voluntary support."

2.1 Name the health indicator referred to in this case. (0.25 point)

2.2 Specify a direct economic result for this case. (0.25 point)

2.3 Link in a logical sequence between the problem and its effect on the agricultural sector. (1 point)

3. Referring to document no.2:

3.1 Compare between the development of the total agricultural output and the GDP between the years 2008 and 2011. Justify your answer. (0.5 point)

3.2 referring to question 1.3 and the percentage of agricultural output from GDP, show the extent of the agriculture's sector contribution to GDP. (0.75 point)

4. It is stated in document no.3: "The experiences of several countries have shown that GDP growth from agriculture has double effectiveness in reducing poverty; thus contributing to social stability" Link in a logical sequence how the total agricultural output may reduce poverty. (0.75 point)

5. Name the developmental policy referred to in the first paragraph of document no.3. Extract the intended objectives. (1 point)

6. It is mentioned in document no.1: "in addition to the lack of provision of soft loans."

6.1 Mention a measure that may contribute in solving this problem. (0.25 point)

6.2 Referring to documents no.1 and 3, explain the kink between applying the measure to solve the problem mentioned above and referred to in document no.1 and achieving the developmental objective referred to in the second paragraph of document no.3. (0.75 point)

7. The above documents refer to economic problems and a demographic situation from which the agricultural sector suffers. Write a text in which you suggest: (4.5 points)

- Two measures to solve the two problems facing the agricultural marketing in document no.1

- One measure to solve the demographic situation referred to in the second paragraph of document no.2

- Link between the application of each measure and the intended result

- Mention the combined effect of these measures on the agricultural sector and Lebanese society.

# Second Optional Set: Writing an Economic Essay (12 points)

# **Document no.1:**

The potential for rapid privatization of the electricity sector will remain limited due to the current status of *Electricité du Liban* (EDL). What should be done in this regard is an immediate and serious action to put an end to the effects and serious financial repercussions of EDL on the State's budget and employees (...)

Despite the fact that the approved tariffs are not considered low compared to regional standards, the total losses of EDL are high. The government is forced to cover EDL's net losses in addition to the public debt service and capital expenditure of this institution, which amounted to about US \$ 1 billion in 2006, representing 3.5% of the gross domestic product in the fiscal year of 2006. In contrast, the investment requirements in this sector for the next five years are estimated to be about \$ 1.5 billion. In light of the increasing demand for energy consumption, the private sector, rather than the public sector, needs to secure the required investments and services in the future, due to the high public debt burden underpinning the public sector.

المصدر: المؤتمر الدولي لدعم لبنان، 25 كانون الثاني 2007، باريس 2

# **Document no.2:**

Among the reasons for the increase in the problem of rationing in electricity is the large difference between the production and the demand, as demand reached 3150 megawatts, while the plants can produce 1600 to 1700 megawatts at best; in addition to continuous faults in the production plants, the shortage in stations and transmission lines, the infringements of networks and the decline in collection (...) Also, between 30% and 40% of the energy produced in Lebanon is wasted, while 60% of the power plants are over 20 years old and 10% are over 40 years of age; also the 220 KV network transmission is not interconnected; making it an unstable network and prone to problems in summer and winter.

(...) This crisis has many economic and social repercussions. About 75% of Lebanese companies consider electricity to be a major obstacle along with competitiveness. At the social level, the average household electricity bill in Lebanon is estimated at more than \$ 1,200 a year, more than two thirds of which are generated by private generators, which in turn produce about 750 megawatts of electricity. More than 40% of Lebanese energy needs depend on these generators.

In addition, the electricity sector costs the State's treasury more than \$ 1.6 billion annually, or about 20% of its total revenues. The cumulative deficit of the institution reaches \$ 30 billion since 1992 due to 150% of the subsidized tariff for more than 1.5 million subscribers.

المصدر: النهار العدد 25956 - 2016

The above documents show the problems from which suffer the electricity sector in Lebanon. After the supply of electricity before 1975, without interruption and while Lebanon was supplying it to the neighboring countries, the sector was in a state of financial deficit since the nineties until today. In addition to the problem of rationing, which is constantly worsening; also the documents state some appropriate suggestions to address this situation.

## Referring to the above documents and your acquired knowledge, address this issue:

- Mentioning two of the public sector's problems regarding the investment transactions in general while showing four reasons for worsening the rationing problem and specifying their direct economic effect
- Extracting the effects and negative repercussions of EDL on the various financial, economic and social levels while showing the effect of each on the economic situation
- Suggesting the appropriate policy to address the financial and economic problems referred to in the documents, explaining two measures within the policy and evaluating this policy by considering two aspects of each

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أسس التصحيح (تراعي تعليق الدروس والتوصيف المعدّل للعام الدراسي 2016 – 2017 وحتى صدور المناهج المطوّرة)

# **Obligatory Part One:** Using Economic Concepts and Techniques (8 points)

1. 1.1 Creativity and innovation  $\rightarrow$  individual initiative (0.25 point)

1.2 Enhancing competition  $\rightarrow$  Freedom of prices (0.25 point)

1.3 Promoting international competition  $\rightarrow$  freedom of international trade (0.25 point)

2. 2.1 Motivation type: moral motivation (delegated part of his/her authorities) (0.5 point)

2.2 The direct person in charge of the mistakes committed by the employee is the sales manager (0.25 point)

2.3 The leadership pattern of the general manager: authority compliance leader as he depends on punishment without consulting one of the managers or supervisors (0.5 point)

3.

Case	Stage	Reason	Direct Result
Reduction in demand on loans	Recession	Increase in interest	Decrease in
issued for investment		rates on loans	investment
Economic enterprises reduce	Depression	Increase in stocks of	Dismissal of workers
production levels		unsold products	or unemployment
	(1 point)	(0.5 point)	(0.5 point)

4.1

Q	FC	$\Delta \mathbf{Q}$	ΔΤC	MC	ТС	AC
0	200				200	
10	200	10	500	50	700	70
20	200	10	100	10	800	40
30	200	10	75	7.5	870	29.16
40	200	10	45	4.5	920	23
50	200	10	30	3	950	19
60	200	10	210	21	1160	19.3
70	200	10	370	37	1530	29.85
		(0.25 point)	(0.25 point)		(0.25 point)	(0.25 point)

$$MC = \frac{\Delta TC}{\Delta Q}$$

$$\Rightarrow \Delta TC = MC \times \Delta Q (0.25 \text{ point})$$

$$\Rightarrow \Delta TC = TC_2 - TC_1$$

$$AC = \frac{TC}{Q} (0.25 \text{ point})$$

4.2 The level of production that achieves maximum profit is 50 units as at this production level the marginal cost is equal to the market selling price (3 mu) (0.5 point)

5.1 Calculation of the maximum production capacity

AC = 
$$\frac{TC}{Q}$$

$$\Rightarrow AC = \frac{FC + VC}{Max. \text{ production capacity}}$$

$$\Rightarrow Max. production capacity = \frac{FC + VC}{AC}$$

→ Max. production capacity = 
$$\frac{8000}{16}$$
 = 500 shoes (0.5 point)

5.2 Calculation of the break-even point:

 $V = \frac{7000}{500} = 14 \text{ mu}$ 

$$Q_0 = \frac{F}{P_m - V} = \frac{1000}{20 - 14} = 166.66$$
 shoes

$$Q\% = \frac{Q_0}{Max. \text{ production capacity}} = \frac{166.66}{500} = 33.34\% (0.5 \text{ point})$$

5.3

Profitability rate = 
$$\frac{\text{Profit}}{\text{Investment}} \times 100$$

Profit = Revenues – Total costs = (Per-unit price  $\times$  maximum production capacity) – (fixed cost + variable cost)

Revenues =  $500 \times 20 = 10,000$  mu Total cost = 1000 + 7000 = 8000 muProfit = 10,000 - 8,000 = 2,000 muProfitability rate =  $\frac{2,000}{50,000} \times 100 = 4\%$  (0.5 point) 5.4 Interest rate =  $\frac{4,500}{50,000} \times 100 = 9\% (0.25 \text{ point})$ 

As the interest rate (9%) is greater than the profitability rate (4%), the most appropriate choice for the investor is depositing his/her money in a commercial bank and not going for the project. (0.25 point)

## First Optional Set: Analyzing Economic Documents (12 points)

1.1.1 "The farmer is selling their production to merchants "on consignment" to get their profit after selling it, without forgetting the deduction of the wholesaler's commission"

"Also, there is also no clear mechanism for the export process." (0.25 point)

1.2 Decrease in food security or threaten food security (0.25 point)

Putting the agricultural output on consignment to get their profit after selling it  $\rightarrow$  decrease in the farmer's income and his purchasing power  $\rightarrow$  the farmer would leave the agricultural work or would stop investing in the agricultural sector  $\rightarrow$  decrease in the agricultural production  $\rightarrow$  decrease in food security (0.75 point)

The absence of a clear mechanism for the export process  $\rightarrow$  decrease in the demand for the agricultural products abroad  $\rightarrow$  decrease in investment in the agricultural sector  $\rightarrow$  decrease in the agricultural production  $\rightarrow$  decrease in food security (0.75 point)

2. 2.1 the percentage of medically ensured (0.25 point)

2.2 Direct economic result: decrease in productivity (0.25 point)

2.3 Absence of social security for farmers  $\rightarrow$  decrease in productivity of labor  $\rightarrow$  decrease in the agricultural sector's contribution to GDP  $\rightarrow$  decrease in growth of the agricultural sector Or

Absence of social security for farmers  $\rightarrow$  decrease in productivity  $\rightarrow$  decrease in competitiveness  $\rightarrow$  decrease in demand on consumption  $\rightarrow$  decrease in investment in the agricultural sector  $\rightarrow$  decrease in growth of the agricultural sector (1 point)

3.1 increase in the Gross Domestic Product from 38.649 billion Lebanese Lira to 58.346 billion Lebanese Lira and the overall agricultural production also increased from 2.007 billion Lebanese pound in 2008 to 2.036 billion Lebanese pound in the year 2011. (0.5 point)

3.2 The percentage of the overall agricultural production from GDP decreased between the years 2008 and 2010. It was 4.17% in 2008 and decreased to 3.85% in 2010 and increased slightly to 4.04% in 2011 (0.5 point). This implies that the contribution of the agricultural sector is still weak despite the overall improvement of the overall agricultural production after the year 2008. (0.25 point)

4. The growth in the overall agricultural production implies an increase in investment in this sector  $\rightarrow$  increase in job opportunities and decrease in unemployment in this sector  $\rightarrow$  increase in revenues  $\rightarrow$  reduction of poverty and contribution in social stability (0.75 point)

5. The sustainable human development policy (0.5 point)

The objective is to encourage the proper management of natural resources, a sustainable investment and to avoid wasting these valuable resources and ensuring its availability to future generations. (0.5 point)

6.1 Ensuring the availability of long term soft loans for the agricultural sector and establishing agricultural specialized banks to provide long term loans with low interest rates. (0.25 point)

6.2 Provision of soft loans for the agricultural sector and establishing agricultural specialized banks to provide long term soft loans with low interest rates  $\rightarrow$  reduction in production cost  $\rightarrow$  increase in the sector's competitiveness  $\rightarrow$  increase in the demand for agricultural products  $\rightarrow$  or increase in investment in the agricultural sector  $\rightarrow$  increase in job opportunities  $\rightarrow$  increase in increase in farmers' purchasing power  $\rightarrow$  increase in the demand in other sectors in the rural area (such as rural services and transport sector and communication and others) which contributes to rural development. (0.75 point)

7.		
The Problem	The Measure	The Result
The farmer is selling their production to merchants "on consignment" to get their profit after selling it, without forgetting the deduction of the wholesaler's commission	Establishing agricultural cooperatives to market the agricultural output	Regulating the supply of agricultural products in the market a way that it does not surpass the demand level over long periods during the year.
	-Establishing a documentation center or information bank	→ Provide exporters continuously with updates regarding the environment, states and improvement of the markets of the countries to which they are exporting.
The absence of a clear mechanism for the export process	-Organizing advertisement campaigns in foreign markets	→ Introducing suppliers and foreign consumers to the local agricultural products
process	-Providing exporters with guarantees through establishing an insurance company for exports for the exporter to receive the value of his/her exports at the appropriate time with the insurance policy that he/she gets from the company	→ Reassuring inventors
the number of farmers with an average age of 52 years reached about 170,000	The State encourages the youth to work in the agricultural sector through providing them with soft loans (low interest rates over long periods of time)	The youth is more capable of grasping and applying the modern techniques $\rightarrow$ increase productivity and the agricultural return
	2 points	2 points

These above measures leads to the development of the agricultural sector which in its turn leads to the provision of food security (0.5 point)

# Second Optional Set: Addressing an Economic Subject (12 points)

**Introduction** (3 points)  $\rightarrow$  2 points for the content and 1 point for the methodology

The student gets the full mark on the methodology when he mentions the problem and the key points he is going to address in the content.

The problems of the electricity sector (briefly) – defining privatization and stating the objective behind adopting it

Problematic (1 point): What is the extent of the effect of the policy of privatization on the reform of the public sector?

# Body: (7 points)

Methodology: (0.5 point)

The student receives the full mark on the methodology when he/she:

- Presents the main idea at the beginning of the paragraph while supporting each idea with the relevant evidence.

- Links the paragraphs with transitional sentences

- takes into account the sequence of ideas according to the steps presented in the introduction.

# Content: (6.5 points)

Specifying the two problems (0.5 point)

The weak productivity of the public sector (corruption ..)

- The large difference between the production and the demand,
- The continuous faults in the production plants,
- The shortage in stations and transmission lines,
- The infringements of networks and the decline in collection
- Between 30% and 40% of the energy produced in Lebanon is wasted, 60% of the power plants are over 20 years old, 10% are over 40 years of age
- The 220 KV network transmission is not interconnected; making it an unstable network and prone to problems in summer and winter.
- All the above reasons lead to the decrease in productivity (0.5 point)

## Effects (1 point)

- Negative financial impacts: the serious financial effects of EDL on the government's budget... The government is forced to do so to cover the net losses of EDL in addition to the service of public debt and capital expenditures incurred by this institution, which amounted to about one billion dollars in 2006.

Or the electricity sector costs the treasury more than \$ 1.6 billion a year, about 20% of its total revenues. - Economic Implications: Electricity is a major obstacle facing growth and competitiveness.

- Social repercussions: The average electricity bill for the household in Lebanon is estimated at more than 1200 dollars a year, more than two thirds of the bill is paid for special generators

## Effects (1.5 points)

- The repercussions of the financial situation: the government's coverage of the losses of the EDL leads to an increase in the State's expenses to cover the deficit of the institution instead of investing funds in productive investment projects, which leads to a decline in production and economic growth.

-Implications of the economic repercussions: The decline in the competitiveness of (75%) of the Lebanese companies leads to a decrease in demand for consumption and consequently a decline in investment and a decline in economic growth.

- Implications of the social repercussions: The rise in the electricity bill for the household leads to a decline in purchasing power and thus reduced investment, production and economic growth

- 3. The appropriate policy to address the effects:
- Privatization policy (0.5 point)
- Types: BOO and BOT (0.5 point)
- Explanation of each type. (1 point)

#### Policy evaluation:

- Advantages of privatization (0.25 point for both advantages): a. Reduction of public deficit, b) revitalizing the efficiency of public enterprises, c) increase in investment

- Disadvantages of privatization (0.25 point both disadvantages): a - monopoly in the absence of competition., b) Unemployment due to termination of employment, c) Raising the tariff randomly

#### **Conclusion (2 points)**

Methodology: 0.5 point Content: 1.5 point Methodology: The answer to the problem - the result Content: Summarize the ideas presented in the body of the essay