

الإسم: مسابقة في مادة الاقتصاد
الرقم: المدة: ثلاث ساعات

Obligatory Set: Using Economic Concepts and Techniques (8 pts.)

1. Copy the following table on your answer sheet; then, complete it with the appropriate statements. (2 pts)

Problem	Appropriate policy to solve the problem	Appropriate measure within this policy
Inflation due to the increase in wages and salaries		
Increase in the concentration of income		
Decrease in the qualification of the labor force		
Increase in the illiteracy rate and decrease in public spending on health		

2. The human resource department in a certain company, decided to offer daily food meals to the workers at the maintenance department working extra time hours in this factory.
- 2.1. Specify the nature of this decision. (0.25 pt)
- 2.2. Deduce the type of motivation that was adopted by the company. (0.5 pt)
- 2.3. According to the pyramid of Maslow, for basic human needs, name the appropriate need satisfied in this case. (0.25 pt)
3. A country decided to adopt an economic system aiming to eliminate the barriers among social classes and ensure equality among people on all levels.
- 3.1. Name the economic system adopted in this country. (0.5 pt)
- 3.2. Specify the principle that achieves the targeted objective. (0.5 pt)
4. An investor desires to invest in producing tables. The corresponding feasibility study showed the following:
Sales value = 14,000,000 m.u Total fixed cost: 2,400,000 m.u
Maximum production capacity = 20,000 tables Average variable cost per table = 500 m.u
- 4.1. Calculate the break-even point for this project. (1 pt)
- 4.2. Specify the situation of the enterprise in case the factory produced and sold 40% of its maximum production capacity. Justify your answer. (0.5 pt)
5. The total cost of a certain factory is represented by the following function: $TC = 0.4 Q^2 + 250 Q + 100$
And the market price (P) is represented by the following function: $P = 20 Q + 58$.
- 5.1. Calculate the average fixed cost, the average variable cost and the marginal cost at the level of production of $Q = 8$ units. (1 pt)
- 5.2. Calculate the quantity of production (Q) at which the enterprise may maximize its profit. (0.5 pt)
6. Starting from a closed economy and where the government does not intervene in social issues, the consumption of households is related to income (R) according to the following function: $C = 0.7 R + 25$
And the investment of economic firms is related to interest rate according to the following function: $I = -25(i) + 8$
(Knowing that the value of investment and the value of income are in monetary units)
- 6.1. Calculate the value of investment at an interest rate of 4%. (0.5 pt)
- 6.2. Specify the value of income that realizes the equilibrium between saving and investment. (0.5 pt)

Choose one of the following sets:

First Optional Set: Analyzing Economic Documents (12 pts)

Document no 1:

The factors forming obstacles facing investment in Lebanon revolve around several axes, most important of which are:

- Lack of political and security stability on the various levels.
- Huge deterioration in the productivity of public institutions and administrations, especially those related to managing some economic activities despite the heavy financial burdens.
- The treasury's ability to finance investment in infrastructure dropped; to face the weakness of infrastructure, the Lebanese are forced to ensure these needs from their private investments.
- The drop of economic growth in Lebanon in a worrying manner in the last four years; its rate nowadays fluctuates between 1% and 2% after having reached almost 10% in the previous years.

المصدر: نهوض لبنان نحو دولة الإنماء-٢٠١٦

Document no 2:

In the frame of the partnership signed with the Lebanese government, the World Bank published lately a study prepared by the World Bank Group, discussed the status of the job market in Lebanon and its inability to absorb the increasing numbers of job applications; a fact that increases unemployment rates and doubles the number of unemployed. However, employers in Lebanon, who suffer from high production cost, this situation contributed to the increase in the unemployment rate among Lebanese and pushed many of the graduates to search for job opportunities outside Lebanon.

(...) and this shows that the reasons behind the job market crisis described by the decrease in job opportunities embedded in the crisis from which the productive sectors suffer. These reasons, according to economists, are due to the following factors:

First factor: absence of a governmental policy that supports domestic output aiming at ensuring protection from foreign competition.

Second factor: the adoption of the consecutive Lebanese governments of capitalist profit (yield) based policies without supporting the real productive economic sectors. This is done by providing the appropriate conditions for the Lebanese and non-Lebanese capitalists to invest in the profit based yet unproductive economic sectors.

Third factor: the increase in the costs of public services due to the continuous interruption of electric current and water supply for long periods.

المصدر: لبنان وخطر استفحال البطالة ١٧ ايلول ٢٠١٦

Document no 3:

The government budget suffers from a deep and chronic deficit that threatens the financial, economic and social stability, especially it aggravated the last years to reach 5.9% of GDP in 2013 due to chaotic spending and decelerating incomes, then, the deficit reached 6.2% in 2014 and almost 8.56% in 2015.

(...) The fiscal policy is efficiently weak and its goal was limited to searching for sources to increase its revenues without considering the economic and social consequences of its implementation.

المصدر: نهوض لبنان نحو دولة الإنماء-٢٠١٦

Referring to the documents above, answer the following questions:

1. Referring to document no.1:
 - 1.1. Extract the problem from which the public institutions and administrations in Lebanon suffer from. (0.5 pt)
 - 1.2. Specify the type of unemployment that may lead to this problem. (0.5 pt)
2. Specify the stage of the economic cycle reflected in document no.1. Justify your answer by a proof from the document. (1 pt)
3. Referring to document no.2:
 - 3.1. Extract the economic problem that the employers in Lebanon are suffering from. (0.5 pt)
 - 3.2. Deduce the type of unemployment reflected in this document. Justify your answer. (1 pt)
 - 3.3. Link between the extracted problem and the type of unemployment. (1pt)
4. Deduce a demographic effect for unemployment while mentioning its negative economic result. (1pt)
5. Specify one measure that the government may adopt to protect its domestic output from foreign competition and show its effect on the exchange with the international market. (1pt)
6. It's stated in document no.1: "The treasury's ability to finance investment in infrastructure dropped".
 - 6.1. Extract from document no.3 two reasons that led to this fact. (0.5 pt)
 - 6.2. Link between the decrease in the investment in infrastructure and the stage of the economic cycle reflected by the document no.1. (1 pt)
7. Referring to the above documents, write a text in which you suggest: (4 pts)
 - An appropriate policy to solve the economic problem and the social problem combined, mentioning two measures within this policy and linking between both measures and the solution of the two problems.
 - An appropriate structural policy to solve the problem of public administrations and the deficit in public budget together and two measures within this policy while linking between the two measures and the solution of the two problems.

Second Optional Set: Studying an Economic Subject (12 pts)

Document no.1:

A responsible figure in the ministry of agriculture, declared that the agricultural cost of production in Lebanon is extremely high, especially when compared with the cost of production in Syria and Egypt. The energy prices are not backed up, "as opposed to neighboring countries", the rate of mechanization is very low, and the status of infrastructure is deteriorated, "and there are no long term investment in the irrigation systems, agricultural roads and dams and there are no real wholesale markets", while monopolies increases the cost of production inputs.

Also, there is a problem in marketing the agricultural output as most profits go to traders and the farmer gets the smaller portion from the final price of the agricultural outputs, his share reaches almost 20% and the remaining goes to "brokers".

And this responsible figure confirms that "investors do not trust the agricultural sector and they seek high and quick profits", indicating that "the share of the agricultural sector from banking loans is almost 0.6%, and its share from foreign direct investment is almost 0.48%."

المصدر: مجتمع واقتصاد العدد ٢٢٢٤ الإثنين ١٦ شباط ٢٠١٤

Document no 2:

The industry suffers from several problems, some of which are:

High cost of production: the prices of properties on which factories are built are high, and the energy prices used in production (diesel, gas and fuel) are also high, and the cost of employment is high. There is as well the cost of bureaucracy and the prices of raw materials that are mostly imported from outside.

External trade pacts: over the years, Lebanon signed trade agreements with Arab countries and the European Union... Lebanon "only got from these agreements a shortage in exports and an increase in imports."

المصدر: مجتمع واقتصاد العدد ٢٦٠٥ الاربعاء ٣ حزيران ٢٠١٥

Referring to the information presented in the above documents and to your acquired information, write an essay in which you discuss: Five problems that the agricultural sector suffers from and two problems for the industrial sector in Lebanon while specifying an economic result for each problem and an appropriate measure to solve each one.

Explaining the results of applying the measures combined together on both the agricultural and the industrial sector.

مسابقة في مادة الاقتصاد
المدة: ثلاث ساعات

Obligatory Part: Using Economic concepts and techniques (8 points)

1. Copy the following table on your answer sheet; then, complete it with the appropriate statements. (2 points)

Problem	Appropriate policy to solve the problem	Appropriate measure within this policy
Inflation due to the increase in wages and salaries	Income policy (0.25)	<ul style="list-style-type: none">Fixing wagesImposing a ceiling on the rate at which wages increase in a way that it does not increase the rate at which productivity increases. (0.25)
Increase in the concentration of income	Income redistribution (0.25)	<ul style="list-style-type: none">Increase social servicesImpose progressive direct taxation (0.25)
Decrease in the qualification of the labor force	Human Resource Development (0.25)	<ul style="list-style-type: none">Rehabilitating workersTraining (0.25)
Increase in the illiteracy rate and decrease in public spending on health	Human Development (0.25)	<ul style="list-style-type: none">Increase in public spending on education or mandatory education or increase in public spending on health care or increase the percentage of socially secured. Or ... (0.25)

2.

- 2.1 Tactic decision (0.25 point)
2.2 Financial or materialistic motivation. (0.5 point)
2.3 Physiological needs. (0.25 point)

3

- 3.1 Marxist Leninist (0.5 point)
3.2 Collective or public property (0.5 point)

4

4.1- $Q = CF/P - AVC$ (0.25 point)
 $= 2,400,000/700 - 500$ (0.25 point) = 12,000 table (0.25 point)

Price = $P = 14,000,000 / 20,000 = 700$ (0.25 point)

4.2- $40 * 20,000 / 100 = 8,000$ table (0.25 point) the situation of the enterprise is loss since it is producing 8,000 tables less than 12,000 tables (break- even point) (0.25 point)

Or maximum capacity level of production = break- even point / maximum capacity of production * 100 = 60% (0.25 point)

Since the maximum capacity level of production (60%) > the percentage produced and sold (40%)

So the situation of the enterprise is: loss. (0.25 point)

The total cost of a certain factory is represented by the following function: $TC = 0.4 Q^2 + 250 Q + 100$

And the market price (P) is represented by the following function: $P = 20 Q + 58$.

5.1-

Average Fixed Cost = Fixed Cost / Quantity = $100/8 = 12.5$ m.u. (0.25 point)

Average Variable Cost = Variable Cost / Quantity = $0.4 Q^2 + 250 Q / Q = 0.4 (8)^2 + 250 (8) / 8 = 253.2$ m.u (0.25 point)

Marginal Cost = $TC' = 0.4 * 2 * Q + 250$
 $= (0.4 * 2 * Q) + 250$

$$= (0.8*Q) + 250 \text{ (0.25 point)}$$

$$= 256.4 \text{ m.u (0.25 point)}$$

5.2- Profit maximization $MC = MP$
 $0.8Q + 250 = 20Q + 58 \text{ (0.25 point)}$
 $19.2Q = 192$
 $Q = 192/19.2 = 10 \text{ units (0.25 point)}$

6.1- $I = -25(i) + 6$
 $= -25(0.04) + 6 \text{ (0.25 point)} = 5 \text{ m.u (0.25 point)}$
 $R = C + S \quad S = I$ at equilibrium according to Keynes
 $R = C + I$
 $= 0.7R + 25 + 5 \text{ (0.25 point)}$
 $R = 100 \text{ m.u (0.25 point)}$

First Choice Set: Analyzing Economic Document

1. Referring to document no.1:
 - 1.1. Huge deterioration in the productivity of public institutions and administrations. **(0.5 point)**
 - 1.2. Hidden or concealed or disguised unemployment. **(0.5 point)**
 2. Economic crisis: recession **(0.5 point)**; **proof: (0.25 point)**: The drop of economic growth in Lebanon.... reached almost 10% in the previous years. **(0.5 point)**
 3. Referring to document no.2:
 - 3.1. High production cost **(0.5 point)**
 - 3.2. Circumstantial or cyclical unemployment. **(0.5 point)** Proof: high production cost or the crisis from which the productive sectors suffer. **(0.5 point)**
 - 3.3. \nearrow Cost of production \rightarrow \nearrow prices \rightarrow \searrow competitiveness **(0.25 point)** \rightarrow \searrow demand on consumption **(0.25 point)** \rightarrow \searrow Investment **(0.25 point)** \rightarrow not creating new job opportunities **(0.25 point)** \rightarrow circumstantial or cyclical unemployment.
 4. Emigration **(0.5 point)**. Economic result: decrease work productivity or waste of human capital **(0.5 point)**
 5. Any measure within the protectionist policy **(0.25 point)**.
 Any measure within the protectionist policy \rightarrow enhancing the competitiveness of local products with respect to foreign products **(0.25 point)** \rightarrow \nearrow demand on local products **(0.25 point)** \rightarrow \searrow size of imports **(0.25 points)**
 6.
 - 6.1. Due to chaotic spending / decelerating incomes / The fiscal policy is weak efficiently **(0.25 point for each reason: 2 reasons are required)**
 - 6.2. \searrow Investment in infrastructure \rightarrow capital flight **(0.25 point)** \rightarrow \searrow investment **(0.25 point)** \rightarrow \searrow production **(0.25 point)** \rightarrow \searrow economic growth **(0.25 point)**
 7. An appropriate policy that solves the economic problem and the social problem combined is the supply side policy **(0.5 point)**, two measures within this policy :
 - Ensuring a competitive environment by obliging economic enterprises to renew their machines **(0.25 point)**
 - Any measure that decrease the cost of production. **(0.25 point)**
 - These two measures led to the increase in productivity and to the decrease in the cost of production **(0.25 point)** which lead to the increase in competitiveness **(0.25 point)** that increase the demand on consumption **(0.25 point)** which leads to the increase in investment **(0.25 point)** and might lead to increase production from one side and then increase in economic growth **(0.25 point)** and might lead to the creation of new job opportunities from other side and thus decrease in unemployment **(0.25 point)**
- An appropriate structural policy that solves the problem of public administrations and the deficit in public budget together is the privatization policy **(0.5 point)** and two measures within this policy are: B.O.O and B.O.T **(0.25 point for each measure)** that stimulate the efficiency and productivity of the public institutions and enterprises. **(0.25 point)** lowering the public debt (increasing the revenues with respect to the expenses) **(0.25 point)**

Second Choice Set: Studying an Economic Subject (12 points)

Introduction: (1 point for methodology and 2 points for the content)

Methodology: (1 point): mentioning an adequate and coherent issue (problematic) and announcing the main points which will be discussed in the body.

Content (2 points):

- Mentioning the problems that the agricultural sector suffers from:
 (High cost of production/ energy prices are not backed up/ the rate of mechanization is very low/ the status of infrastructure is deteriorated/ monopoly/ lack of financing/ absence of protectionist policy)
- Mentioning the problems that the industrial sector suffers from:
 High cost of production / deficit in the trade balance

Example of the problematic: How can we achieve a sustainable economic growth while having all these obstacles facing the agricultural sector and the industrial sector? (1 point)

Body: (1 point Methodology, 6 points on the content)

Methodology: (1 point):

- Presenting each main idea at the beginning of a paragraph and supporting it with valid arguments, evidences and statements.
- Connecting paragraphs with transition sentences in a coherent and sequential manner proposed in the introduction.

Content: (6 points):

Problem	Result (0.25 point for each result)	Measure (0.5 point for each result)
1. The status of infrastructure is deteriorated	Decrease in the agricultural revenues/ decrease investment/ decrease productivity	Building roads / dams/wells/ irrigation system /...
2. Monopolistic environment and un competitive market that allow	Decrease in the agricultural revenues/	Encouraging the building of agricultural cooperative
3. High cost of production or increase the cost of production inputs.	Decrease competitiveness/ increase prices	Cooperative specialized in agricultural inputs / providing farmers with agricultural inputs at very low prices.
4. The rate of mechanization is very low	Decrease productivity	Building research agricultural centers that work on spreading techniques to farmers and training them on using these techniques.
5. Lack of financing	Decrease investment/ increase cost of production	Building specialized banks that issue long term loans to farmers with low interest rates.
6. Absence of protection policy	Deficit in trade balance	Protectionist policy measures
7. High cost of production	Decrease competitiveness /increase in prices	Supply side policy measures
8. A shortage in exports and an increase in imports	Increase the deficit in trade balance	Any measure within the protectionist policy

All these measures combined together → **increase in productivity and decrease in the cost of production** → increase competitiveness of agricultural and industrial sector (0.25 point) → increase demand on consumption → increase investment in agricultural and industrial sector (0.25 point) → increase production of agricultural and industrial sector → integration between the agricultural and the industrial sector (0.25 point) → **sustainable economic growth/ balance economic growth.**

Conclusion : (2 points)

Methodology : (0.5 point)

Answering the probelematic and synthesizing ideas

Content : (0.5 point)

Summarize all the ideas that were put fourth in the introduction and body and answering the problematic.