MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD

UNIVERSITY OF MALTA, MSIDA

**MATRICULATION EXAMINATION
ADVANCED LEVEL
MAY 2013**

SUBJECT:	ECONOMICS
PAPER NUMBER:	I
DATE:	15th May 2013
TIME:	4.00 p.m. to 7.00 p.m.

Answer **FOUR** questions. **TWO** from **each** Section. All questions carry equal marks. This paper carries 60% of the global mark.

Section A

1. a) Discuss three factors that can influence the demand for billboards. (9 marks)
    b) Discuss three factors that can influence the supply of billboards. (9 marks)
    c) Evaluate the possible impact of an increase in the price of steel on the supply of billboards. Illustrate your answer by means of a diagram. (7 marks)

2. a) Using a graph show the budget line for two goods and explain the meaning of the budget line. (8 marks)
    b) Explain why a budget line can shift inwards and outwards. Use a diagram to show shifts. (7 marks)
    c) If the income of a household decreases, what is the effect on consumption choices? Use a graph to explain this change. (10 marks)

3. a) Define the concept of elasticity in the market and give an example with an explanation of two types of elasticity. (8 marks)
    b) What are the main determinants of price elasticity of demand and price elasticity of supply? (8 marks)
    c) Distinguish between perfectly inelastic demand, inelastic demand and unit elastic demand. Give a numerical example in each case. (9 marks)

4. a) Why is the average cost curve U shaped in the short run? (8 marks)
    b) Define the law of diminishing returns and provide a numeral example to explain it. (8 marks)
    c) Use a graph to distinguish between: constant return to scale; increasing returns to scale; and decreasing returns to scale. (9 marks)

5. a) What are the characteristics underlying a monopolistic market? (7 marks)
    b) What is the main difference between an oligopoly and monopolistic competition? (8 marks)
    c) Explain using one graph the difference between the price of a perfectly competitive market and that of a monopolistic one. (10 marks)

6. a) Define the term Pareto-optimality. (6 marks)
    b) Explain the concept of externalities and give examples of both positive and negative ones. (10 marks)
    c) What is the difference between public and private goods? What type of policies can correct externalities? (9 marks)

Section B

7. a) What is the difference between GDP and GNP? (6 marks)
    b) Which are the leakages from and injections into the circular flow of income? (10 marks)
    c) What are the factors which can lead to higher economic growth? (9 marks)

8. a) Explain the difference between cost push and demand pull inflation. (8 marks)
    b) What is a price index? Describe two types of indices? (7 marks)
    c) Draw the Phillips curve and explain its meaning, both in the short run and in the long run. (10 marks)

9. a) Explain three types of unemployment and what policies can be used to alleviate them. (9 marks)
    b) What is the impact of unemployment on society and the economy? (6 marks)
    c) Malta's employment rate remains low. How can governments encourage people to become part of the labour market? (10 marks)

10. a) What does a government budget deficit imply? Is this a negative or positive thing for the economy? (10 marks)
    b) Define an automatic stabiliser and show this through an example of how this works. (9 marks)
    c) How is government debt accumulated over time and what is needed to lower the debt level? (6 marks)

11. a) What is an exchange rate regime? Give two examples. (8 marks)
    b) What is the role of the banking system within an economy? (8 marks)
    c) What is the role of the European Central Bank? (9 marks)

12. a) Explain the different components of the balance of payments. (8 marks)
    b) What is the difference between visible and invisible items in the balance of payments? Give three examples of each type. (10 marks)
    c) Explain what is meant by the balance of trade. (7 marks)

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MATRICULATION EXAMINATION
ADVANCED LEVEL
MAY 2013

SUBJECT:	ECONOMICS
PAPER NUMBER:	II
DATE:	17th May 2013
TIME:	9.00 a.m. to 12.00 noon

Answer **THREE** questions, at least **ONE** from Section A and **ONE** from Section B. All questions carry equal marks. This paper carries 40% of the global mark.

Section A

Question 1

The following table shows the costs of production for Firm A and Firm B's total revenues.

Output	FIRM A Total Costs	FIRM B Total Revenues
1	19	100
2	29	190
3	35	270
4	42	320
5	56	350
6	82	360
7	124	350
8	187	320
9	278	270
10	400	200

a. For Firm A, plot the average costs (AC) and marginal costs (MC) and comment on their nature. What market structure and firm behaviour could give rise to these cost patterns? (7 marks)
b. If the firm's price is twice its marginal revenue, find the price levels that the firm would charge at each level of output in order to maximise profits. (6 marks)
c. For Firm B, plot demand and marginal revenue functions and comment on their nature. What market structure and firm behaviour could give rise to these demand patterns? (7 marks)
d. Over what range of marginal costs would this firm produce an output between 4 and 5, if its objective is to maximise profits? (5 marks)
e. Compare and contrast the characteristics of the market structures for Firms A and B. (8 marks)

Total: 33 marks

Question 2

The demand and supply of chocolate is provided in the table below.

Price (Euro)	Demand (units/ year)	Supply (units/ year)
0	320	0
10	280	40
20	240	80
30	200	120
40	160	160
50	120	200
60	80	240
70	40	280
80	0	320

a. Explain why, at a zero price, demand is positive while supply is equal to zero. (5 marks)
b. Plot the demand and supply curves. (4 marks)
c. Calculate the price elasticity of demand at each output level and provide an interpretation for the figure/s you obtain. (6 marks)
d. Calculate the price elasticity of supply at each output level. Provide an interpretation for the figure/s you obtain. (6 marks)
e. Which determinants of supply are relevant in the case of chocolates? (6 marks)
f. How could chocolate producers try to enhance the demand for chocolate? (6 marks)

Total: 33 marks

Question 3

The table below provides information on the production schedule for sunglasses. It shows the number of worker-weeks that the firm can hire.

Labour input (worker-weeks)	Total products per week
6	899
7	1004
8	1105
9	1202
10	1295
11	1384
12	1469
13	1550

a. Assuming sunglasses sell at €10 per unit, use the information above to derive a demand curve for labour. (7 marks)
b. Explain the difference between the marginal physical product and the marginal revenue product. (4 marks)

c. What is the maximum amount the firm would be willing to pay each worker per week if seven workers were hired? (5 marks)
d. If the going weekly salary is €900 per week, how many workers would be hired? Present your answer in both tabular and graphical form. (9 marks)
e. Suppose the industry faces a decline in the demand for sunglasses. What would be the new equilibrium wage and employment level? Explain your answer. (8 marks)

Total: 33 marks

Section B

Question 4

Equilibrium in a closed economy is characterised by the equation $Y = C + I + G$, where:

Y = output
C = consumption
I = investment
G = government expenditure

a. Suppose equilibrium output in this economy is 600, consumption is 400 and investment is 80. What is the level of government spending on goods and services? (5 marks)
b. Suppose investment rises by 40 and the marginal propensity to consume is now set at 0.75. What is the new equilibrium level of C, I, G and Y? (6 marks)
c. Suppose now that instead of investment rising by 40, G is increased by 30. What would be the new equilibrium of C, I, G and Y, assuming that the marginal propensity to consume is also set at 0.75? (6 marks)
d. Suppose full employment output is 800. By how much would G have to be raised in each of the three instances above to get the economy to full-employment output? (6 marks)
e. What is the impact on the multiplier if a proportional income tax of 10% is introduced? (5 marks)
f. What is the impact on the multiplier if the economy is opened for trade and a marginal propensity to spend on imports of 0.4 is observed? (5 marks)

Total: 33 marks

Question 5

According to NSO data, during 2012 the visible trade gap widened by €399.6 million to €1,915.1 million.

€ million	2011	2012
Imports	**5334.4**	**6123.8**
Industrial Supplies	**1548.4**	**1542.4**
Primary	52.2	103.1
Semi-Finished	1362.1	1290.3
Finished	134.1	149.0
Capital Goods and Others	**875.8**	**808.0**
Consumer Goods	**976.3**	**993.0**
Food and Beverages	401.4	415.7
Durable Goods	337.5	325.1
Others	237.4	252.2
Fuels and Lubricants	**1933.8**	**2780.4**
Exports	**3818.9**	**4208.7**
Visible Trade Gap	**-1515.5**	**-1915.1**

a. Define the visible trade gap and clearly explain what indication it provides in terms of macroeconomic analysis. (5 marks)
b. Why would you expect the Maltese visible trade gap to be negative? (5 marks)
c. In 2011 total imports amounted to €6,295 million, total exports amounted to €6,635 million, final consumption expenditure amounted to €5,379 million and gross fixed capital formation was equal to €826 million. Calculate net exports and GDP for 2011. Why are net exports now positive when the visible trade gap in the same year was negative? (8 marks)
d. What is the likely impact on Malta's visible trade gap and GDP following:
   (i) An appreciation of the euro? (5 marks)
   (ii) A recession in the economies of Malta's main trade partners? (5 marks)
e. What further information is required to arrive at Malta's Balance of Payments? (5 marks)

Total: 33 marks

Question 6

According to the NSO, in 2011 social protection made up 34.3% of total general government expenditure, followed by expenditure on general public services (15.7%), education (13.9%) and health (13.3%). In contrast, expenditure on housing and community amenities had the lowest contribution of total expenditure (0.7%), followed by defence (2.0%).

Total general government expenditure for 2011 stood at €2,751.5 million, representing an increase of €101.3 million. The main reasons for this increase included:

- Higher disbursements on social protection, primarily observed in pensions.
- Added expenditure in general public services, mainly brought about by a rise in interest expenditure and intermediate consumption.
- Additional health spending, mainly on intermediate consumption and compensation of employees.

On the other hand, environmental protection registered lower outlays in waste water management as a result of the completion of the Malta South Sewage Infrastructure project.

For 2011, the share of total general government expenditure as a percentage of GDP was estimated at 42.0 per cent.

a. What could have brought about the increase in pension expenditure? Is this trend likely to persist in the near future? (6 marks)
b. What are the main factors contributing to the increase in health expenditure? What is likely to happen in the next 5 years? (6 marks)
c. How does the public debt figure affect government's total expenditure? (6 marks)
d. How would you explain the high share of government expenditure as a percentage of GDP in Malta? How would you expect this percentage to change in the near future? Does the current Eurozone crisis affect this percentage? (7 marks)
e. Explain how a completion of an infrastructural project leads to lower costs, as in the case of waste water management? (4 marks)
f. What additional information is required to calculate the fiscal deficit/ surplus? (4 marks)

Total: 33 marks