## MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD UNIVERSITY OF MALTA, MSIDA

#### MATRICULATION CERTIFICATE EXAMINATION ADVANCED LEVEL SEPTEMBER 2012

SUBJECT: ECONOMICS

PAPER NUMBER:

**DATE:** 4th September 2012 **TIME:** 9.00 a.m. to 12.00 noon

Answer **FOUR** Questions, **TWO** from each section. All questions carry equal marks. This Paper carries 60% of the global mark.

## **Section A**

- 1. (a) Explain, with the help of examples, how opportunity cost may be important to (a) individuals,(b) governments,(c) businesses. (9 marks)
  - (b) What factors, apart from price, can affect the demand for alcoholic drinks? (7 marks)
  - (c) Assume it is government policy to reduce the amount of alcoholic drinks consumed. Thus government imposes a high expenditure tax on the consumption of this product. Discuss what you consider to be the most likely market reaction to a similar policy move. (9 marks)
- 2. (a) Product X has a high income elasticity of demand and a high cross elasticity of demand with its closest substitute. Is it likely to have a low or high price elasticity of demand? Explain your answer. (8 marks)
  - (b) Discuss the concept of price elasticity of supply. (8 marks)
  - (c) Explain whether the concept of price elasticity of supply is relevant to business concerns. (9 marks)
- 3. (a) How does the age structure of the population influence the supply of labour? (8 marks)
  - (b) What are the main factors that influence the demand for labour? (8 marks)
  - (c) Use supply and demand analysis to explain the very high wages earned by world famous actors. (9 marks)
- 4. (a) What is the meaning of a "natural monopoly"? Give examples to illustrate your answer. (7 marks)
  - (b) Identify the main costs of monopoly. (9 marks)
  - (c) Are monopolies always profitable? Explain your answer (9 marks)
- 5. (a) Trace the short run impact of a decrease in demand facing firms operating within a perfectly competitive market. (8 marks)
  - (b) What is the impact in the long run of 5 (a)? (8 marks)
  - (c) "If we agree that perfect competition is the best type of market structure, then it makes no sense to grant patent rights." Discuss. (9 marks)

- 6. (a) Describe the concepts of average cost and marginal cost. (9 marks)
  - (b) A producer of Product Y has noticed that the marginal cost of producing additional units increases rapidly once output exceeds 1000 units. The producer is also aware that demand for this product is such that it can sell any number of units it manages to produce. Would you encourage the producer to expand production beyond this level of output? Explain your reasoning. (8 marks)
  - (c) Assume that this same producer has decided to increase output beyond the point where marginal cost increases. Would this affect the producer's average cost per unit of output sold? (8 marks)

## **Section B**

- 7. (a) The Gross National Income at market prices of Country Y for 2011 was 35% higher than the figure for 2004. State and explain which other pieces of information would be useful to assess whether the average standard of living has risen by 34% in that period. (7 marks)
  - (b) How do economists measure the aggregate value of all economic activity in any country? (9 marks)
  - (c) Discuss what is likely to happen to national income if injections were greater than withdrawals. (9 marks)
- 8. (a) What do you understand by the term monetary policy? (8 marks)
  - (b) Explain carefully the problems that would arise if there were no such thing as money. (8 marks)
  - (c) Explain the process by which the banks can create money. (9 marks)
- 9. (a) Distinguish between:
  - (i) demand pull (9 marks)
  - (ii) cost push inflation. (9 marks)
  - (b) Why is high inflation bad for an economy? (7 marks)
- 10. (a) Describe the main accounts which make up a country's balance of payments. (9 marks)
  - (b) What factors drive the goods and services account of the balance of payments? (7 marks)
  - (c) What are the implications for Malta of a persistent deficit in the current account? (9 marks)
- 11. (a) Examine the impact of an economic downturn on employment. (9 marks)
  - (b) Assess two possible government policies that deal with unemployment.

(8 marks)

- (c) Assess two possible government policies which seek to increase the employment rate. (8 marks)
- 12. (a) Why is the attainment of a fiscal surplus desirable during periods of rapid economic growth? (9 marks)
  - (b) Explain the difference between government budget deficit and government debt. (8 marks)
  - (c) Evaluate the impact of an ageing population on public finances. (8 marks)

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# MATRICULATION CERTIFICATE EXAMINATION ADVANCED LEVEL SEPTEMBER 2012

SUBJECT: ECONOMICS

PAPER NUMBER: II

**DATE:** 5th September 2012 **TIME:** 9.00 a.m. to 12.00 noon

Answer *three* questions, at least one from Section A and one from Section B, and any other question. All questions carry equal marks. This paper carries 40% of the global mark.

## **Section A**

## **Question 1**

The demand and supply for a tablet PC is represented by the following equations:

$$Q_D = 120 - 10(P + t)$$
  
 $Q_S = 10 + 5P$ 

Where Q<sub>D</sub>: quantity demanded

P: price

t: tax per unit

Q<sub>S</sub>: quantity supplied

a. What is the equilibrium market price and the equilibrium quantity when no tax is imposed? (6 marks)

Assuming that tax is set at €2 per unit,

- b. What is the new equilibrium market price and new equilibrium quantity? (4 marks)
- c. Based on your answer in (b) above, explain the effect of such a tax on price and quantity.

(3 marks)

- d. Discuss the consumer's share of the tax and the producer's share, using diagrams where appropriate and making reference to price elasticity of demand and supply. (10 marks)
- e. Mention and briefly explain five factors that influence demand and another five factors that affect supply. (10 marks)

Total: 33 marks

## **Question 2**

The following table shows the average cost and average revenue (price) for a manufacturing firm at each level of output.

| Output | Average Cost | Average Revenue |
|--------|--------------|-----------------|
|        | (Euro)       | (Euro)          |
| 1      | 7.3          | 20.0            |
| 2      | 6.8          | 19.0            |
| 3      | 6.5          | 18.0            |
| 4      | 6.4          | 17.0            |
| 5      | 6.5          | 16.0            |
| 6      | 6.8          | 15.0            |
| 7      | 7.3          | 14.0            |
| 8      | 8.0          | 13.0            |
| 9      | 8.9          | 12.0            |
| 10     | 10.0         | 11.0            |

- a. Construct a table to show Total Cost (TC), Marginal Cost (MC), Total Revenue (TR) and Marginal Revenue (MR) at each level of output. Include the figures for Marginal Cost (MC) and Marginal Revenue (MR) mid-way between the output figures. (7 marks)
- b. Plot the Average Cost (AC), Marginal Cost (MC), Average Revenue (AR) and Marginal Revenue (MR) figures in a graph. (4 marks)
- c. Using Marginal Cost (MC) and Marginal Revenue (MR) figures, find the profit-maximising output. (4 marks)
- d. Using Total Revenue (TR) and Total Cost (TC) figures, check your answer to (c).

(4 marks)

- e. "The firm under perfect competition can earn abnormal profits in the short run but only normal profits in the long run." Discuss this statement. (7 marks)
- f. Why might it make sense for a firm which cannot sell its output at a profit to continue in production for the time being? (7 marks)

Total: 33 marks

## **Question 3**

The wage rate that a firm has to pay and the output it can produce vary with the number of workers, as shown in the table below:

| Number of workers | Cost of wages to the | Total output per hour |
|-------------------|----------------------|-----------------------|
|                   | employer in          | (TPP)                 |
|                   | Euro per hour        |                       |
| 1                 | 3                    | 10.0                  |
| 2                 | 4                    | 22.0                  |
| 3                 | 5                    | 32.0                  |
| 4                 | 6                    | 40.0                  |
| 5                 | 7                    | 45.5                  |
| 6                 | 8                    | 50.0                  |
| 7                 | 9                    | 52.0                  |
| 8                 | 10                   | 52.0                  |

Assume that output sells at €2 per unit.

a. Construct a table to show Total Cost of Labour ( $TC_L$ ), Marginal Cost of Labour ( $MC_L$ ), Total Revenue Product of Labour ( $TRP_L$ ) and Marginal Revenue Product of Labour ( $TRP_L$ ). Put the figures for Marginal Cost of Labour ( $TRP_L$ ) and (Marginal Revenue Product of Labur)  $TRP_L$  in the spaces between the columns.

(7 marks)

- b. How many workers will the firm employ in order to maximise profits? Explain your answer. (6 marks)
- c. What will be its hourly wage bill at this level of employment? (4 marks)
- d. How much hourly revenue will it earn at this level of employment? (4 marks)
- e. Assuming that the firm faces other fixed costs at the rate of €20 per hour, how much hourly profit will it make at the point of equilibrium? (4 marks)
- f. Assume that the workers now formed a union. What is the maximum hourly wage rate which the firm would accept to offer without incurring an hourly loss? Explain the implications of negotiations on the firm's outcome. (8 marks)

Total: 33 marks

## **Section B**

## **Question 4**

According to a National Statistics Office press release, the Retail Price Index (RPI) went up to 104.74 in February 2012, from 104.11 in January 2012, representing an increase of 0.61%. This primarily reflected an increase of 2.03% in the clothing and footwear index, mainly due to seasonally higher prices of garments. Higher prices of fruit and vegetables caused the food index to go up by 1.31%. The water, electricity, gas and fuels index registered a rise of 0.78% on account of higher gas prices. A rise of 0.30% was registered in the transport and communication index due to higher prices of fuels and motor vehicles.

- a. What is the importance and relevance of data on the inflation rate for:
  - (i) Employers? (4 marks)
  - (ii) Employees? (4 marks)
- b. Why is it necessary to have a representative basket of goods in order to measure inflation? (5 marks)
- c. Distinguish between cost-push and demand-pull inflation, giving an example for each type. (6 marks)
- d. How can the Central Bank / government assess whether a particular period of inflation was the result of cost-push or demand-pull inflation? (4 marks)
- e. Many Central Banks try to keep inflation to a predetermined target level. What tool does the Central Bank use to control inflation if it rises above this target level? (4 marks)
- f. Should the Central Bank increase or decrease interest rates during a period of high inflation? Why? (6 marks)

Total: 33 marks

## **Question 5**

According to data published by Eurostat in March 2012, spending on social protection in Malta is growing as much percentage terms than in the rest of Europe. In fact, in 2009 social protection expenditure across the EU27 increased by an average 4.2% over 2008, while in Malta the annual increase was of 8.1%.

EU27 Social Protection Benefits as a percentage of the GDP in 2009 stood at 28.4%, a 10.6 % increase over the previous year, mostly as a result of the recession and consequent unemployment. On the other hand, Malta's Social Protection Benefits as a percentage of GDP went up by 8.3% and expenditure as a ratio of the GDP stood at 19.8% in 2009.

During the same year in Malta, cash benefits as a percentage of total benefits stood at 68.4%. The proportion of benefits in kind in Malta went up by 5.5%. With 52.3% of total expenditure on social protection, Malta ranks third among the EU27 Member States with the highest proportion of expenditure on Old Age/Survivors pensions. With regard to the Sickness/Healthcare function, Malta is the seventh Member State with the highest expenditure reaching 30.8% compared to an EU27 average of 29.6%.

a. Using examples, explain what you understand by "spending on social protection".

(6 marks)

- b. Why is expenditure on social protection necessary in any society? (4 marks)
- c. The increase in the EU27 Social Protection Benefits as a percentage of the GDP has been attributed to the recession and consequent increase in unemployment. Explain how this percentage might be affected by an increase in the numerator and/or a decrease in the denominator. (4 marks)
- d. Why is social protection generally provided by the state? Can the private sector or a private organisation offer social protection services? (6 marks)
- e. What are the implications of an ageing population on social protection expenditure?

(5 marks)

f. It is often argued that high expenditure on social protection might not be sustainable. Explain this argument, making reference to Malta's demographic situation, GDP growth and current expenditure on social protection. (8 marks)

Total: 33 marks

### **Question 6**

In the Labour Force Survey published by the National Statistics Office in March 2012 the number of employed people stood at 167,627, or 47% of the total working age population (considered as the age between 15 to 64). More than 11,700 were unemployed, while 176,783 were inactive.

The largest proportion of employed men (31%) worked in the wholesale and retail sector, hotels and restaurants, and transport and communication sectors. Most of the female employees (46%) worked in service sectors.

- a. What is the difference between an unemployed and an inactive person? How does this difference affect the way the unemployment rate is calculated? (6 marks)
- b. "The distribution of employment by the different economic sectors gives an indication of the contribution each sector makes to Malta's GDP". Comment on this statement, with special reference to the primary, secondary and tertiary sectors' contribution to Malta's current GDP. (8 marks)
- c. Provide examples of 3 policies which a government might want to adopt to expand Malta's active labour supply (6 marks)
- d. What policies would you recommend to reduce unemployment during recessionary years? (7 marks)
- e. Is there a relationship between the inflation rate and the level of unemployment? If yes, explain this relationship using diagrams where appropriate. (6 marks)

Total: 33 marks