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

# MATRICULATION EXAMINATION ADVANCED LEVEL MAY 2014

**SUBJECT:** ECONOMICS

PAPER NUMBER:

**DATE:** 19<sup>th</sup> May 2014 **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) Explain the link between the basic economic problem of scarcity, opportunity cost and prices faced by consumers, workers or firms. Explain how an equilibrium price for a product is established in a free market and how it may change. (11 marks)
  - b) Using demand and supply analysis, explain the possible causes of the increase in the sales of electronic goods such as tablets, experienced in recent years. (8 marks)
  - c) Discuss whether the imposition of maximum prices by government would solve the problem of scarcity. (6 marks)
- 2. a) Illustrate and compare the way in which the demand schedule and budget line diagrams represent the effect of (i) an increase in the price of a good and
  - (ii) an increase in a consumer's income. (9 marks)
  - b) Explain how the marginal utility theory may be used to construct a consumer's demand curve for a product. (8 marks)
  - c) Explain the meaning of the 'equi-marginal principle' of consumer demand and how this concept may be used to determine the optimum combination of goods consumed. (8 marks)
- 3. a) Distinguish between price elasticity of demand and income elasticity of demand. With the aid of diagrams, discuss whether a firm's revenue would increase, in response to price changes, if the price elasticity of demand for its product became highly elastic. (8 marks)
  - b) Explain, with examples, the significance of the value of a good's cross elasticity of demand in relation to its substitutes and complements. (8 marks)
  - c) Explain how and why the price elasticity of supply of agricultural goods differs from that of manufactured goods. (9 marks)
- 4. a) With the aid of the appropriate diagram, explain the meaning of the Law of Diminishing Marginal Returns and illustrate how this affects total output. (9 marks)
  - b) Explain why a firm's short-run average cost curve is usually drawn as a U shape. (8 marks)
  - c) Explain the link between the short-run average cost curve and the long-run average cost curve of a firm. (8 marks)
- 5. a) Describe the characteristics of a perfectly competitive market. Which of these features are also present in monopolistic competition? In which situation, however, does monopolistic competition differ from perfect competition? (10 marks)
  - b) Discuss whether price, output and profit levels are likely to be the same in perfectly competitive firms as in monopolies given that they all aim to maximize profits. (10 marks)
  - c) Explain why monopoly behaviour is very often regulated. (5 marks)

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- 6. a) Explain the factors affecting the supply of labour and how these affect the shape of the supply curve for labour hours. (8 marks)
  - b) Explain the main factor affecting the demand for labour by a profit-maximising firm.

(8 marks)

c) Explain how the wage rate is determined in a perfectly competitive labour market. (9 marks)

## **Section B**

- 7. a) Define GDP and explain the different methods by which it can be measured. (7 marks)
  - b) Explain the difference between nominal and real GDP. What would have to occur for real GDP to be higher than nominal GDP in any given year? (8 marks)
  - c) Is the measure of real GDP a good indicator of the actual level of welfare within a country? Why? (10 marks)
- 8. a) What does the slope of the consumption function represent? (7 marks)
  - b) What are the main determinants of investment? (8 marks)
  - c) By making use of the appropriate diagram, explain the impact of an increase in investment on the equilibrium level of national income. (10 marks)
- 9. a) Describe the three main motives for holding money. (6 marks)
  - b) Which tools can the Central Bank use in order to control the supply of money? (10 marks)
  - c) Explain what impact an increase in the money supply would have on the equilibrium interest rate in the economy. (9 marks)
- 10. a) Distinguish between demand pull and cost push inflation. (8 marks)
  - b) Explain, with examples, the differences between frictional unemployment and structural unemployment. (8 marks)
  - c) Does the negative relationship between unemployment and inflation always hold? Discuss. (9 marks)
- 11. a) What do you understand by the term government budget deficit? In what way does this differ from government debt? (8 marks)
  - b) Discuss, with examples, two types of fiscal policy measures that can be implemented by the Maltese government in order to reduce its budget deficit. (8 marks)
  - c) Explain the purpose of automatic fiscal stabilizers and discuss one factor which could limit their effectiveness. (9 marks)
- 12. a) Describe two advantages and two disadvantages of both fixed and flexible exchange rate regimes. (8 marks)
  - b) Explain how it is possible for two countries to mutually benefit from trade based on the law of comparative advantage. (8 marks)
  - c) Discuss three possible causes of a currency depreciation and evaluate the likely impact on the Maltese balance of trade of a depreciation of the Euro against the British Pound. (9 marks)

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# MATRICULATION EXAMINATION ADVANCED LEVEL MAY 2014

SUBJECT: ECONOMICS

**PAPER NUMBER:** I

**DATE:** 20<sup>th</sup> May 2014

**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 quantities demanded and supplied per week of a given product at different price levels are given in the table below.

Price	Quantity	Quantity
(€)	Demanded	Supplied
	(units)	(units)
5	20	5
6	18	8
7	16	11
8	14	14
9	12	17
10	10	20
11	8	23
12	6	26
13	4	29
14	2	32

- a. Using the information in the Table, plot the demand and supply functions and find the equilibrium price and quantity. (9 marks)
- b. Assume that Government sets a maximum price of  $\triangleleft 1$ .
  - i. How will consumers react?

(4 marks)

ii. How will producers react?

(4 marks)

- iii. Is the economy better off compared to a situation where the price is at equilibrium? (4 marks)
- c. Assume now that Government imposes a minimum price of  $\Theta$ .
  - i. How will the behavior of consumers change?

(4 marks)

ii. Will the producers change their behaviour?

(4 marks)

iii. Is the economy better off compared to a situation where the price is at equilibrium? (4 marks)

Total: 33 marks

# **Question 2**

Assume a firm faces the following production function, keeping capital constant:

Number of workers	Units of output
0	0
1	49
2	90
3	123
4	148
5	165
6	174

Each unit of output sells for € regardless of the number of units sold.

- a. What is the physical marginal product of the third worker? (3 marks)
- b. What is the third workers' marginal revenue product? (3 marks)
- c. Draw the derived demand curve for labour. (6 marks)
- d. Assuming that the firm's goal is to maximize profit, how many workers should the firm hire if the wage rate is €75 per worker? Explain. (6 marks)
- e. Why don't all workers receive the same wage rate? Provide three explanations. (9 marks)
- f. An economic recession leads to a fall in the demand for the product being sold. How would you expect the equilibrium wage and employment level to change? Explain your answer. (6 marks)

Total: 33 marks

# **Question 3**

Consider the following table which represents a firm's quantity of sales (Q), price per unit (P) and cost per unit or average cost (AC).

		Average
Quantity	Price	Cost
(units)	(€)	(€)
1	25	33
2	25	27
3	25	23
4	25	21
5	25	20
6	25	21
7	25	23
8	25	27
9	25	33
10	25	40

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- a. Construct and briefly describe the average and marginal revenue curves as well as the average and marginal cost curves. (8 marks)
- b. What type of market structure might the firm fit into? Give reasons for your answer. (6 marks)
- c. At what output level does the firm maximize profits? (3 marks)
- d. Is the firm operating in the short run or in the long run? Why? (6 marks)
- e. Explain why the firm equates marginal revenue with marginal cost in order to maximize profits (4 marks)

f. How would the monopolist's quantity supplied change if its:

i. demand increases? (3 marks)

ii. fixed costs increase? (3 marks)

Total: 33 marks

# **Section B**

# **Question 4**

Estimates published by the Eurostat show that Malta had a 6.4% unemployment rate in November 2013, marking a 0.1% drop from October 2013. With this rate, Malta registered the fourth lowest unemployment rate as, on average, countries in the Euro area face a 12.1% unemployment rate (up from 11.8% in November 2012). Across the 28 member states of the EU, the rate increased from 10.8% in November 2012 to 10.9% in November 2013. In terms of absolute figures, in the EU28, 26.553 million men and women, of whom 19.241 million in the euro area, were unemployed in November 2013.

Eurozone youth unemployment reached a record high of 24.4%, with 3.58 million under-25s in the euro area jobless in November 2013. The rate of youth unemployment is very high in some countries such as Greece and Spain, reaching more than 50%.

Jose Manuel Barroso, President of the European Commission, warned that while the Eurozone was showing strong signs of recovery, the crisis was far from over. "We're not out of the crisis with such high levels of unemployment," Barroso said. Barroso also argued that the present unemployment levels are "unacceptable" and a threat to the overall recovery process.

- a. How is unemployment measured? (6 marks)
- b. How would you explain Malta's relatively low unemployment rate compared to the EU average?

  (6 marks)
- c. What is the implication of having a high youth unemployment rate? What could this lead to? (6 marks)
- d. In what ways could the high unemployment levels in the euro area threaten the recovery process?

  (6 marks)
- e. What policy measures/ initiatives could the Maltese and European governments introduce to tackle:
  - i. Structural unemployment? (4 marks)
  - ii. Youth unemployment?

Total: 33 marks

(5 marks)

# **Question 5**

According to the Central Bank of Malta's Quarterly Review 2013-Q3, following the breach of the 3% deficit threshold in 2012 and the re-opening of the excessive deficit procedure for Malta in July 2013, ... additional fiscal consolidation effort is needed to make progress towards the medium-term objective of a balanced budget and to achieve a sustainable reduction in the debt ratio. This requires the Government to continue to reform the pension system and to implement measures that would contain the cost of healthcare and other public services.

Bringing the debt-to-GDP ratio down would be easier in a context of sustained economic growth. In turn, the Maltese economy has to remain competitive on international markets, particularly because other competitor countries are restraining labour costs and prices. Wage growth must be aligned with productivity.

- a. Who sets this 3% deficit threshold? What is the purpose of setting this 3% deficit threshold? Why must Malta adhere to it? (6 marks)
- b. What do you understand by a "fiscal consolidation effort"? In your answer, also give 2 examples of such efforts. (6 marks)
- c. Why does Malta need to target a balanced fiscal budget in the medium-term? (4 marks)
- d. What do you understand by the "debt ratio"? What are the advantages of reducing the debt ratio? (6 marks)
- e. What are the main factors that are pointing towards the need to reform:
  - i. pensions? (3 marks)
  - ii. healthcare services? (3 marks)
- f. What is the economic argument for aligning wage growth to productivity gains? (5 marks)

Total: 33 marks

# **Question 6**

According to a National Statistics Office press release, in December 2013 the annual rate of inflation in Malta stood at 1.04%, while a year earlier the annual rate was 2.79%.

At the same time, the eurozone's inflation rate fell to 0.8% in December 2013, down from 0.9% in November 2013. This Eurostat estimate shows the inflation rate moving further away from the European Central Bank's (ECB) target. The latest data may fuel concerns that the eurozone risks a period of deflation, in which consumers delay purchases in the expectation that prices will fall further.

The ECB expects inflation to remain low for some time but then to move back up towards the bank's target, its president, Mario Draghi, said in January 2014. He said the expectation for the medium to long term was for inflation to remain "anchored" to the ECB's target.

- a. How does the National Statistics Office measure inflation? (5 marks)
- b. What are the practical problems in compiling data for inflation? (5 marks)
- c. Why is it important for policymakers to obtain regular information on the inflation rate? (6 marks)
- d. What is the European Central Bank's inflation target (in percentage terms)? (3 marks)
- e. Why does the European Central Bank have an inflation target and who needs to stick to this target? (7 marks)
- f. What tools can the European Central Bank use to keep inflation within its target? (7 marks)

Total: 33 marks