L-Università ta' Malta

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD

ADVANCED MATRICULATION LEVEL
2025 FIRST SESSION

SUBJECT:	**Economics**
PAPER NUMBER:	I
DATE:	30th April 2025
TIME:	4:00 p.m. to 7:05 p.m.

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

SECTION A

Answer TWO questions from this section.

1. a. Draw a production possibility frontier and explain the opportunity cost concept referring to the diagram. (5)

   b. State whether the two statements below are true or false providing a short explanation:

      i. The more difficult it becomes to obtain credit, the higher the demand for durable consumer goods. (5)
      ii. An increase in social media advertising related to clothing causes an extension in the demand curve for clothing. (5)

   c. What factors can prevent a market from reaching equilibrium? Provide **TWO** examples. (10)

   (Total: 25 marks)

2. a. The price of pasta sauce may have increased due to a significant drop in wages in the pasta manufacturing industry. Explain. (5)

   b. Define the elasticity of supply. Explain **TWO** factors that affect the elasticity of supply, applying them to the supply of private tuition. (8)

   c. What is meant by elastic demand, inelastic demand, perfectly elastic demand and perfectly inelastic demand? Provide a relevant example for **each**. (12)

   (Total: 25 marks)

3. a. The total output of a bicycle factory changes as more workers are employed, whilst the scale of the plant is kept fixed.

      i. Is the bicycle factory operating in the short run or in the long run? Explain your answer. (2)
      ii. What is meant by the law of diminishing returns? (5)

   b. Distinguish between fixed costs, variable costs and average costs. (6)

   c. What do you understand by returns to scale? How do a series of short run average cost curves relate to the long run average cost curve? (12)

   (Total: 25 marks)

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4. a. Explain how a monopolist maximises profits in the short and in the long run. Use a diagram to support your answer. (8)

   b. What is a 'natural monopoly'? Mention **THREE** reasons why it is important for Government to regulate a 'natural monopoly'. (12)

   c. In what way can price discrimination be used by monopolists? (5)

(Total: 25 marks)

5. a. Explain what is normal profit. (5)

   b. Explain why perfectly competitive firms can only make normal profits in the long run. (8)

   c. Compare and contrast perfect competition and monopolistic competition. (12)

(Total: 25 marks)

6. a. The demand for Labour is a derived demand. Explain this concept. (5)

   b. As wages increase it becomes more valuable spending time working rather than on leisure. However, there comes a point in wage increase at which leisure is preferred to work. Explain. (8)

   c. Explain why the wage rate of a mechanical engineer is higher than that of an office clerk. (12)

(Total: 25 marks)

SECTION B

Answer TWO questions from this section.

7. a. Define GDP and distinguish between real and nominal GDP. Which of these two measures would you use to measure the production of output? Why? (7)

   b. Explain the circular flow of income, within the context of the various leakages and injections involved in the generation of national income. Given the positive annual GDP growth rate within the Maltese economy, between 2022 and 2024, what would be the likely impact on national income of the resulting increase in imports of goods and services, that was however required in order to support this positive economic growth period. (9)

   c. Discuss the significance of improvements in technology and the quality of labour on long run economic growth. (9)

(Total: 25 marks)

8. a. Describe the relationship between household disposable income and aggregate household consumption. Use a diagram to support your answer. Discuss **ONE** other determinant of household consumption behaviour. (9)

   b. On the basis of the accelerator principle, explain what the overall level of investment within an economy primarily depends on? (7)

   c. It is argued that expansionary fiscal policy can generate a positive economic impact. Explain how such a policy could generate a positive economic effect, but it may also cause an inflationary gap. Use a diagram to support your answer. (9)

(Total: 25 marks)

9. a. Discuss **THREE** factors which impact the demand for money. (7)

   b. Explain the process of credit creation. What are the effects of an increase in the reserve (or liquidity) ratio on the process of credit creation? (9)

   c. Explain how a central bank can undertake open market operations in order to lower the equilibrium interest rate in the economy. Use a diagram to support your answer. (9)

(Total: 25 marks)

10. a. Explain the differences between inflation, deflation and hyperinflation. Which Consumer Price Index would you assess if you wanted to study the behaviour of inflation across European Countries? (7)

    b. Describe **THREE** types of unemployment and provide **ONE** example of a policy that can be implemented to alleviate the negative impact on the labour market. (9)

    c. Could the unemployment rate and the inflation rate decline simultaneously? Discuss using a diagram to support your answer. (9)

(Total: 25 marks)

11. a. Explain the differences between a government budget deficit and the level of national debt. Provide **TWO** reasons why high levels of national debt are generally considered undesirable. (8)

    b. Utilising the concepts of aggregate supply and aggregate demand, explain the impact of the government undertaking a contractionary fiscal policy to reduce the budget deficit. Provide **ONE** example of such a policy and explain how it would affect the equilibrium level of output and the price level in the economy. (9)

    c. Discuss a government's main motives for implementing supply-side policies. Provide **TWO** examples of such policies and explain how the implementation of such policies could create any undesired effects. (8)

(Total: 25 marks)

12. a. What does it mean when a currency loses value? Identify **TWO** consequences of a currency depreciation. (8)

    b. Identify and discuss the various components of the balance of payments. What would be the likely impact on the balance of trade of the Maltese Economy if the British pound depreciates against the Euro? (8)

    c. Discuss **THREE** benefits and **THREE** costs associated with the creation and operation of a free trade area between cooperating states. (9)

(Total: 25 marks)

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MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD

ADVANCED MATRICULATION LEVEL
2025 FIRST SESSION

SUBJECT:	**Economics**
PAPER NUMBER:	II
DATE:	2nd May 2025
TIME:	9:00 a.m. to 12:05 p.m.

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

1. Table 1 represents the market demand and supply schedules for commodity A over a range of prices.

Table 1

Price (€)	Demand (units/ year)	Supply (Units/year)
300	3,000	2,100
315	2,850	2,250
330	2,700	2,400
345	2,550	2,550
360	2,400	2,700
375	2,250	2,850
390	2,100	3,000
405	1,950	3,150
420	1,800	3,300

a. Plot the demand and supply curves. Find the market equilibrium and equilibrium quantity. (6)

b. Suppose the initial price was €375. What would be the percentage change in quantity demanded if prices were to be reduced by €15? Would your answer be different if you started at any other price? (6)

c. Calculate the price elasticity of demand for all prices and interpret any changes in elasticity values, if any. Why is knowledge of the price elasticity of demand of a product relevant for a company's pricing strategy for that product? (12)

d. Assume that the Government imposes a sales tax of €30 per unit. Draw the supply curve after the tax is imposed and find the new market equilibrium price and equilibrium quantity. Is the new equilibrium quantity different from the previous one, why? (9)

(Total: 33 marks)

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2. A firm producing a particular product faces the following average cost and average revenue shown in Table 2:

Table 2

Output	Average Cost (€)	Average Revenue (€)
15	1344	5400
30	1260	5250
45	1239	5100
60	1260	4950
75	1323	4800
90	1428	4650
105	1575	4500
120	1790.6	4350
135	2070	4200
150	2400	4050

a. Calculate the total costs (TC), the total revenue (TR), the marginal cost (MC) and the marginal revenue (MR) for all levels of output. (7)

b. Plot the Average Cost (AC) and the Average Revenue (AR) in one graph and the Marginal Revenue (MR) and the Marginal Cost (MC) in a separate graph. (5)

c. At which level of output should the firm produce to be most profitable? How much profit will the firm earn in this case? Highlight the area of the graph which represents the profit made. (9)

d. Is the profit maximising level of output allocative and productive efficient? Explain your answer and plot the relevant curves on the graph paper provided. (7)

e. Explain what would happen if average revenues at each level of output decrease by 10%? Would it still be viable for the firm to operate? (5)

(Total: 33 marks)

3. A newly set-up firm is considering the number of workers it needs to employ to produce a particular product. It faces the following costs and output figures:

Table 3

Number of Workers	Labour Costs in Euro per hour per employee	Total Output per hour
20	40	216
24	44	248
28	48	272
32	52	288
36	56	300
40	60	312
44	64	320
48	68	324

Assume that each product sells at €32.00 per unit and that each employee works 8 hours per day.

a. Construct a table to show the Total Cost of Labour per day (TC_L), Marginal Cost of Labour (MC_L), the Total Revenue Product per day (TRP_L), and the Marginal Revenue Product (MRP_L). (8)

b. How many workers will the firm employ to maximise profits? What will its hourly wage bill and hourly revenue be at this level of employment? What is the profit per unit at the level of output? Explain your answer. (10)

Suppose that the firm is considering offering the possibility for each worker to work 2 hours per day over and above the 8-hour workday. However, each worker cannot work more than 47 hours per week. The rate per hour for overtime is 1.671 times the normal rate. Assume that total output per hour increases by 10% due to a new incentive scheme.

c. Would this change the answer provided in (b) on the number of workers the firm employs to maximise profits? Show your workings. (7)

d. If the firm decides to increase the selling price to €35.00 per unit, but now incurs an additional labour cost of €9.02 per hour per employee, would this change the answer provided in (c)? Why or why not? Discuss your answer using calculations. (8)

(Total: 33 marks)

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SECTION B

4. In 2024, the general government deficit is set to fall to 4.0% of GDP, from 4.5% in 2023, due mainly to a decrease in subsidies, including measures to mitigate the impact of high energy prices and the national airline's restructuring costs.

   In 2025, the deficit is forecast to further decrease to 3.5% of GDP. In particular, subsidies are expected to drop further as a percentage of GDP, while the measures to mitigate the impact of high energy prices are expected to remain unchanged in nominal terms. Compensation of employees, social expenditure and public investment are also expected to decline somewhat as a share of GDP. This is projected to be partially compensated by decreasing revenues from personal income taxes due to a comprehensive reform of income brackets.

   Based on unchanged policies, the deficit is set to decline further to 3.1% of GDP in 2026, mainly reflecting a further decrease of subsidies as a share of GDP and the higher growth rate of revenues compared to the growth rate of nominal GDP, as the efforts to improve tax administration start to bring results.

   In 2023, the debt-to-GDP ratio fell by 2 pps. to 47.4%, despite the high primary deficit, due to strong nominal growth and the impact of the benchmark revision. A stock-flow adjustment related to the equity injection in the national airline and a less favourable interest-growth-rate differential are expected to drive the increase of the public debt to 49.8% of GDP in 2024. Smaller primary deficits are forecast to stabilise the debt ratio by 2026, just above 50% of GDP.

   Reference: European Commission (2024), Autumn 2024 Economic forecast for Malta.

   a. As a member of the euro area, Malta is obliged to follow fiscal rules of 3 per cent public deficit and 60 per cent public debt relative to GDP. Based on the above figures, is Malta in line with these rules? If not, identify **ONE** measure that the Maltese Government could apply to be in line with these rules. (12)

   b. If the deficit as a percentage of GDP is projected to continue declining by 2026, why is the European Commission expecting the debt-to-GDP ratio to increase by 2026? Explain. (9)

   c. "…Compensation of employees, social expenditure and public investment are also expected to decline somewhat as a share of GDP. This is projected to be partially compensated by decreasing revenues from personal income taxes due to a comprehensive reform of income brackets." Discuss this statement, particularly explaining why the government is expecting decreasing revenues from personal income taxes. (7)

   d. "A stock-flow adjustment related to the equity injection in the national airline and a less favourable interest-growth-rate differential are expected to drive the increase of the public debt to 49.8% of GDP in 2024." A stock-flow adjustment which represents differences between the annual change in public debt and the budget deficit can be a significant source of debt increases. Discuss. (5)

(Total: 33 marks)

5. The Central Bank of Malta publishes a wide range of monetary statistics and indicators, including broad measures of money supply, its components and its counterpart assets. Table 4 below highlights the monetary aggregates according to the October 2024 release:

Table 4

MONETARY AGGREGATES (€ million)	**OCT-24**	**OCT-23**
Currency issued	1,848.4	1,485.9
Overnight deposits	21,395.6	20,659.9
Deposits redeemable at notice up to 3 months	69.3	127.7
Deposits with agreed maturity up to 2 years	4,489.6	4,094.2
Broad Money	27,800	26,362.7

Reference: Central Bank of Malta (October, 2024). The Contribution of Resident MFIs to the Euro Area Monetary Aggregates.

a. Compute the value of:
   i. Narrow Money (M1);
   ii. Intermediate Money (M2); and
   iii. M3 – M2.

(9)

b. On 1st January 2008, Malta officially adopted the euro. Thus, the Central Bank of Malta became a member of the Eurosystem which meant that it no longer had 'autonomous' monetary policy. Discuss **SIX** functions of the Central Bank of Malta and their importance for the Maltese economy. (6)

c. Calculate the absolute change and the year-on-year growth rate in October 2024 of M1 and M2. (6)

d. Discuss the monetary policy measures the European Central Bank implemented to address the economic challenges posed by the COVID-19 pandemic and the subsequent disruptions arising from the conflicts in the Middle East and the war between Russia and Ukraine. How were these measures effective, if at all? (12)

(Total: 33 marks)

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6. Table 5 below shows Consumption (C) and Income (Y) data for a closed economy without government. Investment (I) is exogenous and fixed at €3.2 billion per year.

Table 5

Income (€ million)	**Consumption (€ million)**
0	8,000
5,600	12,000
11,200	16,000
16,800	20,000
22,400	24,000
28,000	28,000
33,600	32,000
39,200	36,000
44,800	40,000
50,400	44,000
56,000	48,000
61,600	52,000

a. Calculate aggregate demand at **each** level of income and find the equilibrium income level. (10)

b. Using the data provided in Table 5 above, derive the consumption function. What is the marginal propensity to consume, and what value does it take in this case? (8)

c. Discuss the implication of a downward change in the marginal propensity to consume of 0.2 on the marginal propensity to save and on GDP. (6)

d. Calculate the value of the income multiplier coefficient in this economy following an injection of €1.6 billion in the form of investment. What would be the change in equilibrium income? (9)

(Total: 33 marks)