

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD

ADVANCED MATRICULATION LEVEL 2024 SECOND SESSION

SUBJECT: Economics

PAPER NUMBER:

DATE: 29th August 2024

TIME: 9:00 a.m. to 12:05 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. Discuss **TWO** challenges resulting from the economic problem of scarcity and choice. (5)
 - b. A movement along the demand curve can be caused by a change in population. Is this statement true or false? Explain by illustrating your answer with a diagram. (10)
 - c. Use a demand and supply curve diagram to explain what happens when:
 - i. there is an increase in personal income tax; (5)
 - ii. there is an industrial technological innovation; (5)

(Total: 25 marks)

- a. To prevent financial problems at University, a taxpayer suggests increasing examination fees. What would be expected in terms of the price elasticity of demand for total receipts to increase?
 - b. The demand for good X is price elastic. The price falls. What happens to the total revenue? (8)
 - c. Why are agricultural commodity prices more volatile than manufactured goods? How can they be stabilized? (12)

(Total: 25 marks)

- 3. a. The consumer aims to distribute their income on various commodities to achieve marginal utility. Explain. (8)
 - b. What is:
 - i. the difference between the short run and the long run? (4)
 - ii. the law of diminishing marginal product? (4)
 - c. Give reasons why the Long Run Average Cost Curve might at first fall and later rise. (9)

(Total: 25 marks)

Please turn the page.

- 4. a. Outline **THREE** characteristics of a perfectly competitive market and **THREE** characteristics of a monopoly. (6)
 - b. Discuss how a perfectly competitive firm and a monopoly maximise profits in the long run. (10)
 - c. What are the benefits for the consumer from perfect competition when compared to monopoly? (9)

(Total: 25 marks)

5. a. Discuss **TWO** features exhibited by oligopoly.

(8)

b. What do you understand by monopolistic competition?

- (10)
- c. What is product differentiation? Mention **THREE** types and provide an example for **each**. (7)

(Total: 25 marks)

- 6. a. What happens in the labour market when firms have the power to set wages unilaterally? (5)
 - b. How are wages determined in a free market economy?

(10)

 c. "Various government policies often affect the demand for labour, supply of labour, and the equilibrium in the labour market. One such thing is the imposition of a minimum wage". Discuss.

(Total: 25 marks)

SECTION B

Answer TWO questions from this section.

- 7. a. Describe the different methods which can be applied to measure aggregate GDP. What must occur for the value of GNP to be less than that of GDP? (7)
 - b. The Covid-19 pandemic has created a simultaneous decline in household consumption expenditure and in imports of goods and services. Based on your knowledge of the circular flow of income for an open economy, how would the **TWO** factors affect the level of gross national income? (9)
 - c. Explain in detail **TWO** benefits and **TWO** costs linked with the process of long run economic growth. (9)

(Total: 25 marks)

- 8. a. Explain, by making use of the appropriate diagram, what the slope of the Keynesian consumption function represents and what is its relation with the income multiplier. (9)
 - b. Discuss **THREE** determinants of aggregate investment behaviour within the economy. (7)
 - c. Explain, by applying the Keynesian income multiplier model, how an increase in aggregate investment would affect the equilibrium level of national income. Give **ONE** example of a key determinant of aggregate investment in the economy. (9)

(Total: 25 marks)

- 9. a. Describe the main functions of money.
 - b. Explain the process of credit creation. What are the effects of a decline in the reserve ratio on the process of credit creation? (9)
 - c. Explain what would be the impact on the equilibrium interest rate of the economy as a result of an expansionary monetary policy effected by the Central Bank. (9)

(Total: 25 marks)

(7)

- 10. a. Explain how a Consumer Price Index, such as the HICP or RPI, is constructed. Which of these two indicators would you choose to assess and compare the inflation rate in Malta with that of other EU countries? (7)
 - b. Describe **THREE** types of unemployment and provide an example of a policy that can be utilised to alleviate the effect of **each** one of these three types of unemployment. (9)
 - c. Based on your understanding of the Philips curve relation, is it possible for the inflation rate and the unemployment rate, to increase simultaneously? Why? (9)

(Total: 25 marks)

- 11. a. Explain the differences between the government budget deficit and the rate of national debt. Explain why a high level of national debt is viewed as an economic burden. (8)
 - b. Discuss the role that automatic stabilizers can have within the context of the overall management of the national economy. (8)
 - c. Suppose government decides to undertake a contractionary fiscal policy in order to decrease the government budget deficit. Provide an example of such a policy, and utilise the aggregate demand and aggregate supply model to show how such a policy would impact the price level and the equilibrium level of output in the economy. (9)

(Total: 25 marks)

- 12. a. Describe the difference between quotas, tariffs, and export subsidies. Provide **ONE** motive that explains why the government would want to implement such policies. (8)
 - b. Describe the components of the balance of payments. What must occur for the balance of payments to be in deficit? Can such a deficit be sustained indefinitely? (8)
 - c. Distinguish between a fixed exchange rate system and a floating (flexible) exchange rate system. Is there a limit in what way a country can sustain a balance of payments deficit, definitely under a fixed exchange rate system? (9)

(Total: 25 marks)



MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD

ADVANCED MATRICULATION LEVEL 2024 SECOND SESSION

SUBJECT: **Economics**

PAPER NUMBER: I

DATE: 30th August 2024

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 a particular product over a range of prices.

Table 1

Price (€)	Demand (units/year)	Supply (units/year)
20	800	200
40	700	300
60	600	400
80	500	500
100	400	600
120	300	700
140	200	800

- a. Plot the demand curve and the supply curve. Find the equilibrium price and equilibrium quantity. (6)
- b. Calculate and interpret the price elasticity of supply for **ALL** price levels and interpret any changes in elasticity values, if any. (6)
- Suppose the product is a particular brand of footwear. Mention **THREE** factors other than price that would influence its supply and **THREE** factors that would influence its demand.
 Discuss **each** factor in relation to the product.
- d. Suppose that to help local producers compete with foreign footwear producers, the government introduces a subsidy of €20. Further to your answer to part (a) above find the new equilibrium price and quantity in the same graph you have plotted. (6)
- e. Discuss the market effects of the subsidy introduction on producer surplus, consumer surplus, and total economic welfare. (9)

(Total: 33 marks)

Please turn the page.

2. Consider Table 2. Q represents the firm's sales quantity, P represents the price per unit, and TC represents the firm's total costs.

Table 2

Q	P	тс
1	260	330
2	260	540
3	260	690
4	260	840
5	260	1000
6	260	1260
7	260	1610
8	260	2160

- a. Calculate the marginal cost (MC) for **ALL** levels of output. (6)
- b. Calculate the marginal revenue (MR) for **ALL** levels of output. (6)
- c. What is the profit-maximising output level? Support your answer using MC and MR, Total Revenue (TR), and Total Cost (TC). (8)
- d. In what type of market structure does the firm operate? Explain your reasoning. (7)
- e. Is the profit-maximising output level the same as the revenue-maximising output level? Why? Explain your answer. (6)

3. Suppose that the labour and capital units required by a local manufacturing company producing furniture are as follows:

Table 3

Output Unit	Labour Unit	Capital Unit
675	9	90
1,080	18	90
2,372	27	90
4,050	36	90
5,909	45	90
7,776	54	90
9,261	63	90
10,368	72	90
11,219	81	90
11,925	90	90
12,452	99	90
12,825	108	90
13,163	120	90

The price of capital is €1,350, while the price of labour is €1,575 per unit.

Assume that this factory operates in a perfectly competitive market where the price is €27 per unit of output.

- a. Construct a table for the average and marginal cost curves and plot them. (6)
- b. Construct a table for the total, variable, and fixed cost curves and plot them. (8)
- c. What do you understand by the law of diminishing marginal product? Does the above data conform to it? Explain your answer using numerical illustrations. (6)
- d. How many units of output will the profit-maximising manufacturer produce? What would be the profit in this case? Is this profit likely to be maintained in the long run? Explain your answer. (Hint: round to 1 decimal place) (7)
- e. Suppose that the price of the fixed input increases by €75 per unit. What would happen in this case? Explain your answer using a diagram.(6)

SECTION B

4. In a press release issued by the National Statistics Office (NSO) on registered employed for October 2023, it was reported that registered full-time employment totalled 280,197 in October 2023, an increase of 8.0 per cent over October 2022. Part-time as a primary job amounted to 33,994, an increase of 4.3 per cent compared to the same period in 2022.

It was also reported that private sector full-time employment went up by 9.9 per cent over one year, reaching 228,643. Public sector full-time employment increased by 0.2 per cent since October 2022, totalling 51,554.

Compared to October 2022, full-time employment for males went up by 8.5 per cent, amounting to 170,488, while that for females increased by 7.3 per cent, reaching 109,709.

Reference: National Statistics Office (March 2024), Registered Employment: October 2023.

- a. What could have led to increases in registered employment? Does this imply that registered unemployment decreased as well? (6)
- b. Are there any other employment and unemployment data sources issued by the National Statistics Office? If yes, do you expect any differences between the datasets? Why or why not?
 (6)
- c. Is there a relationship between a country's population and its labour supply? Explain in detail. (6)
- d. Is there a relationship between the labour market and economic growth? Discuss in detail. (7)
- e. During the COVID-19 pandemic, the Maltese Government announced a series of measures to safeguard jobs. Briefly outline **TWO** such measures and discuss the economic rationale behind them. (8)

5. Assume that the following equations represent key economic relationships for a closed economy:

GDP identity: Y = C + I + G eq. (1)

Consumption function: C = 25 + 0.8 (Y - T) eq. (2)

Tax equation: T = tY eq. (3)

I = 150 eq. (4)

G = 180 eq. (5)

t = 0.2 eq. (6)

Where:

Y = National Income

C = Consumption Expenditure

I = Investment Expenditure

G = Government Final Consumption Expenditure

T = Income taxes

t = marginal tax rate

All variables are measured in millions of Euros.

- a. Define the Marginal Propensity to Consume, the Marginal Propensity to Save, and Autonomous Consumption. What values do **each** take in the equations above? (9)
- b. What is the value of the multiplier coefficient? Show your workings. (7)
- c. Using the above equations, find the equilibrium value of income (Y). (6)
- d. Show algebraically that savings are equal to investment in an economy in equilibrium. (5)
- e. Discuss the implications of:
 - i. the tax rate (t) equal to 0; (2)
 - ii. a change in investment from 150 to 180; and (2)
 - iii. a change in final government expenditure from 180 to 150. (2)

(Total: 33 marks)

Please turn the page.

6. According to News Release 050/2024 published on 18 March 2024, the National Statistics Office (NSO) reported that in February 2024, the annual rate of inflation as measured by the Harmonised Index of Consumer Prices (HICP) was 3.0 per cent, down from 3.7 per cent in January 2024.

The Food and non-alcoholic beverages index had the largest upward impact on annual inflation (+1.22 percentage points), while the Communications Index recorded the largest downward impact (-0.39 percentage points).

The twelve-month moving average rate for February stood at 5.0 per cent.

Reference: National Statistics Office (March 2024). Harmonised Index of Consumer Prices (HICP): February 2024.

- a. The National Statistics Office produces two measures of inflation. Name the **TWO** measures of inflation and highlight the differences between the two. (6)
- b. How does the European Central Bank define price stability, and why is an inflation target of 0% discouraged? (7)
- c. Why is it important for Malta's inflation rate to align with the inflation rates registered by the other economies in the Euro area? (6)
- d. The annual inflation rate as measured by the HICP in February 2024 was 3.0 per cent, down from 3.7 per cent in January 2024. Does this mean that prices are expected to decrease in February 2024 compared to the previous month in the same year? (6)
- e. What is the relationship between the annual inflation rate and the twelve-month moving average rate? (8)