

# MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD

#### ADVANCED MATRICULATION LEVEL 2021 FIRST SESSION

SUBJECT:	Economics
PAPER NUMBER:	Ι
DATE:	17 <sup>th</sup> June 2021
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)	What is opportunity cost? Illustrate the concept, with reference to the production possibi curve.	lity (5)
	b)	Explain the effect of each of the following on the demand for salmon: i) The price of salmon falls. ii) Total income in the economy increases.	(5) (5)
	c)	Explain and demonstrate graphically: i) the effect of an advertising campaign promoting skimmed milk on the equilibrium pr and quantity of full fat milk.	ice (5)

and quantity of full fat milk. (5) ii) the effect of technological improvements in a fish farm on the equilibrium price and quantity of fish. (5)

### (Total: 25 marks)

- a) What is a price ceiling? Discuss **TWO** likely effects of government imposing a price floor, making reference to **ONE** practical example.
  (8)
  - b) Discuss how a change in price will determine total revenue for a company. (10)
  - c) Cross price elasticity of demand between petrol and a car is positive. Is this statement true or false? Give an explanation for your answer. (7)

### (Total: 25 marks)

- 3. a) What is the equi-marginal principle? (5)
  - b) "An additional unit of consumption of any good will always yield an increase in both total and marginal utility". Discuss this statement in the context of the Law of Diminishing Marginal Utility. (10)
  - c) Why is the average cost curve likely to be U-shaped in the long run? (10)

## (Total: 25 marks)

4.	a)	Discuss <b>FIVE</b> characteristics underpinning perfect competition.	(10)
т.	uj		(10)

- b) Explain the long run benefits of a perfectly competitive market for the consumer. (10)
- c) Why is it useful to understand the perfectly competitive model even though its underlying assumptions may not be realistic? (5)

### (Total: 25 marks)

- 5. a) Discuss the model of monopolistic competition in the short and long run, with reference to the excess capacity theorem. (12)
  - b) What is oligopolistic interdependence? Why is this interdependence non-existent under monopolistic competition? (5)
  - c) Discuss the advantages and disadvantages to consumers resulting from the collusive behaviour by firms.
    (8)

#### (Total: 25 marks)

6.	a) What is supernormal profit?	(5)
	b) Can supernormal profits be made by monopolists in the long run?	(10)
	c) What is deadweight loss when comparing perfect competition to monopoly.	(10)

(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 of GDP would you utilise in order to assess the behaviour of output production? Explain why?
  - b) Identify **THREE** reasons why the GDP is not a good measure for the standard of living of a country's citizens? (9)
  - c) Discuss **TWO** benefits and **TWO** costs associated with the process of long run economic growth.
    (9)

## (Total: 25 marks)

- 8. a) Explain, by making use of the appropriate graphical analysis, what the slope of the consumption function represents. (7)
  - b) Explain, within the context of the Keynesian income multiplier model, how an increase in investment would affect the equilibrium level of national income in the economy. Provide ONE example of a factor that could cause an increase in the level of investment spending.
    (9)
  - c) Explain the difference between a deflationary gap and an inflationary gap. (9)

### (Total: 25 marks)

(9)

9.	a)	There are several ways to define "money" but standard measures usually include	М1,
		M2, and M3. What is the relationship between M1 and M2 money? Define M3.	(7)

- b) How do central banks conduct monetary policy?
- c) Explain what impact would the implementation of an expansionary monetary policy have on the equilibrium interest rate in the economy. (9)

### (Total: 25 marks)

- 10. a) Explain the difference between inflation, deflation and hyperinflation. Discuss **TWO** economic costs generally associated with persistently high rates of inflation. (7)
  - b) Distinguish between demand-pull and cost-push inflation and explain which of these two causes of inflation is associated with the occurrence of stagflation. (9)
  - c) Distinguish between Frictional, Structural and Seasonal unemployment and provide ONE example of a policy that can be implemented by policy makers to alleviate each type of unemployment.
    (9)

(Total: 25 marks)

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- 11. a) Explain the difference between a government budget deficit and the level of national debt. Provide **TWO** reasons to explain why high levels of national debt are generally considered to be undesirable.
  (9)
  - b) Suppose that the government wanted to undertake an expansionary fiscal policy to offset the impact of the Covid-19 pandemic on the economy. Provide **ONE** example of such a policy and explain, utilizing the aggregate demand and aggregate supply model, how such a policy would impact the price level and equilibrium level of output in the economy.
     (8)
  - c) What is the government's key motive for implementing supply-side policies? Provide TWO examples of such policies and explain if such policies can also stimulate demand side effects.
    (8)

### (Total: 25 marks)

- 12. a) Explain, with the aid of an appropriate example, how it is possible for two countries to mutually benefit from trade on the basis of the law of comparative advantage. (8)
  - b) Describe the main components of the balance of payments and explain what must occur for the current account to be in deficit.
     (8)
  - c) Distinguish between tariffs, quotas and export subsidies and provide **THREE** motives which explain why policy makers may wish to implement such policies.

(9)

(Total: 25 marks)



# MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD

#### ADVANCED MATRICULATION LEVEL 2021 FIRST SESSION

SUBJECT:	Economics
PAPER NUMBER:	II
DATE:	18 <sup>th</sup> June 2021
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. Suppose that the data in the table below represents the market demand and supply schedules for a painting replica over a range of prices.

Price (€)	Demand (units/year)	Supply (units/year)
4	60	10
8	50	20
12	40	30
16	30	40
20	20	50
24	10	60

a. Plot the demand curve and the supply curve. Find the market equilibrium price and equilibrium quantity.

(6)

b. Calculate and interpret the price elasticity of demand at each output level.

(6)

c. Mention and explain **THREE** factors other than price that are likely to influence demand for a painting replica and **THREE** factors other than price that are likely to influence the supply of a painting replica.

(6)

d. Suppose that to help local painters produce more painting replicas, the government introduces a subsidy of €4. What are the new equilibrium price and quantity?

(5)

e. An adviser to the government is arguing that tax rebates to consumers who want to purchase a painting replica could be more effective than subsidies to local painters. Compare and contrast such policy measures and discuss the market effects of introducing each policy measure.

(10)

2.	The following table shows the relationship between labour and capital used to produce desk
	amps in a certain factory.

Output	Labour Units	Capital Units
20	2	20
53	4	20
117	6	20
200	8	20
292	10	20
384	12	20
457	14	20
512	16	20
554	18	20
589	20	20
615	22	20
636	24	20
650	26	20

The price of labour is €350 per unit, while the price of capital is €300 per unit.

a. Construct a table for the total cost, variable cost and fixed cost curves and plot them.

(9)

b. Construct a table for the average and marginal cost curves and plot them.

(7)

Suppose that each desk lamp sells for  $\in$ 27.

c. At what level of output will the firm produce? What would be the firm's total profit?

(5)

d. Suppose that this firm invests in a new technology that reduces its marginal costs. Does this lead to a change in the price it charges or the profit it makes? Explain your answer.

(6)

e. Is it likely for this factory to continue making super-normal profits in the long-run? Explain why?
 (6)

3. A manufacturing firm producing picture frames faces the following costs and revenues:

Output (Picture Frames)	Total Costs (€)	Total Revenues (€)
1	9.0	36
2	16.8	70
3	24.8	102
4	33.6	132
5	44.1	160
6	57.1	186
7	73.5	210
8	95.5	232
9	125.5	252
10	164.5	270

- a. Construct a table to show the Average Cost (AC), Marginal Cost (MC), Average Revenue (AR) and Marginal Revenue (MR) at each level of output.
- b. Use separate graphs to plot: (i) the Average Cost (AC) and the Average Revenue (AR) figures; and (ii) the Marginal Revenue (MR) and the Marginal Cost (MC). Use the graphs to find the profit-maximising level of output.
- c. Why is the gap between Average Revenue (AR) and Marginal Revenue (MR) increasing as the output increases?

(8)

(8)

- d. Is the profit maximising level of output found in part (b) above, allocatively and productively efficient? Support your answer by plotting the necessary curves on the graph paper provided.
  - (8)
- e. Is the firm operating in the short-run or the long-run? Give reasons and explain your answer.

(4)

## SECTION B

4. The following equations present key economic relationships within a closed economy:

Y = C + I + G C = 40 + 0.75(Y - T) I = 40 G = 25 T = 30t = 0.2

Where:

Y = Income

C = Consumption

I = Investment

- G = Government Spending
- T = income taxes
- t = marginal tax rate

All variables are measured in millions of euro.

a.	Determine final	expenditures	and leakages	from the above.	(6)
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- b. Using the above equations, find the equilibrium value of income (Y).
- c. What is the value of the income multiplier in this economy? Explain the economic meaning of the income multiplier.

(6)

(9)

- d. Discuss the implications of:
  - i. the tax rate (t) being equal to 0;
  - ii. a change in investment from 40 to 35;
  - iii. a change in final government expenditure from 25 to 30.

(12)

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5. According to the Winter 2021 European Economic Forecast published by the European Commission, the impact of the pandemic has extended to inflation developments in both the euro area and the EU. Headline inflation in the euro area, as measured by the Harmonised Index of Consumer Prices (HICP), averaged -0.3% in the fourth quarter of 2020 and remained in negative territory since August. Inflation rates have differed substantially across the non-euro area Member States, from just above 3.5% in Poland to negative in Croatia. In Malta, the inflation rate stood at 0.3%.

Headline inflation decreased primarily due to the sharp drops in energy and services inflation. In the euro area, energy inflation averaged -8% in the fourth quarter, as the impact of the pandemic shock on oil prices felt in March exerted negative base effects. Services inflation declined to just over 0.5% in the fourth quarter, a full percentage point below its average over 2019. The drop in demand and oil prices led to negative non-energy industrial goods inflation, thus dominating remaining supply side constraints reflected, for example, by higher shipping costs. As a result, euro area core inflation fell rapidly to 0.4% in 2020-Q4, from 1.3% in the same quarter of 2019. The initial supply shock that drove food prices higher in spring last year has abated in both processed and unprocessed food. Tax cuts in a number of countries, especially in Germany, and the euro's appreciation, also weighed on euro area inflation.

Reference: European Commission (February, 2021). Winter 2021 European Economic Forecast.

a.	How does the National Statistics Office measure inflation?	(5)
b.	What are the practical problems in compiling data for inflation?	(5)

- c. "Headline inflation in the euro area, as measured by the Harmonised Index of Consumer Prices (HICP), averaged -0.3% in the fourth quarter of 2020 and remained in negative territory since August." In practice, what does it mean to have negative inflation rates? Discuss.
- d. Why is it important for Malta's inflation rate to be in line with the inflation rates registered by the other economies in the Euro area?
   (5)
- e. Discuss the relationship between negative inflation rates and
  - i. Debt;
  - ii. Interest Rates;
  - iii. Wages.

(12)

(6)

(Total: 33 marks)

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Eur'000s	Credit	Debit	Net
Current Account	27,711,248	27,092,551	618,697
Goods	3,397,800	5,034,122	-1,636,322
Services	14,780,363	11,251,428	3,528,935
Primary Income	9,315,364	10,428,553	-1,113,189
Secondary Income	217,721	378,449	-160,728
Capital Account	108,468	1,826	106,642
	Assets	Liabilities	Net
Financial Account	1,416,642	1,126,107	290,535
Direct Investment	-5,982,048	3,675,921	-9,657,969
Portfolio Investment	5,076,876	354,584	4,722,292
Financial derivatives	0	208,050	-208,050
Other investment	2,454,315	-3,112,447	5,566,762
Reserve assets	-132,501		-132,501
Net errors and omissions			-434,804

6. The following National Statistics Office table presents the Maltese balance of payments for 2019.

Reference: National Statistics Office (Dec, 2020). International Economics and Financial Transactions: Q3/2020 [Published on 17 December 2020]

http://nso.gov.mt

a. What is the balance of payments, and explain its importance?

(6)

b. "The balance of payments only reflects visible trade". Discuss whether this statement is true or false.

(6)

- c. What is the difference between primary income and secondary income? Give **TWO** examples.
  - (6)
- d. Explain why Malta's services balance is always in surplus and the goods balance is always in deficit.

(7)

e. Direct investment is showing a negative net balance. What type of policies can encourage inward direct investment?

(8)