L-Università
ta' Malta

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE
EXAMINATIONS BOARD

**ADVANCED MATRICULATION LEVEL
2021 SECOND SESSION**

SUBJECT:	**Economics**
PAPER NUMBER:	I
DATE:	4th October 2021
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) Opportunity cost does not necessarily involve money. Explain. (5)

    b) Explain why price mechanism is an efficient way of allocating scarce resources. Support your answer with diagrams. (10)

    c) Discuss **THREE** economic consequences of introducing rent controls on residential accommodation. Support your answer with a diagram. (10)

    (Total: 25 marks)

2. a) Mention **FOUR** factors, apart from price, that have an impact on demand for a specific commodity of your choice. Specify whether **each** factor mentioned is positively or negatively related to the quantity demanded. (9)

    b) Briefly discuss **TWO** factors that affect the price elasticity of demand and **ONE** factor that affects the price elasticity of supply. (6)

    c) Using marginal utility theory, explain why water, which is so necessary to life, is so cheap compared to diamonds. (10)

    (Total: 25 marks)

3. a) Distinguish between the long run and the short run. (5)

    b) The long run average cost curve is formed by the bottom edge of the family of SRAC curves. Discuss this statement and support your answer by presenting an illustration. (10)

    c) Explain the difference between returns to scale and diminishing marginal product. (10)

    (Total: 25 marks)

Please turn the page.

4. a) Distinguish between normal profit and supernormal profit. (5)

    b) Compare and contrast perfect competition and monopoly in terms of normal profit and supernormal profit. Support your answer with relevant diagrams. (10)

    c) Define deadweight loss. Explain how monopolies can result in deadweight loss. (10)

    (Total: 25 marks)

5. a) Discuss **THREE** characteristics underlying monopolistic competition. (6)

    b) What is the theory of excess (or unutilised) capacity under monopolistic competition in the long run? Support your answer with an appropriate illustration. (12)

    c) Explain why the model of monopolistic competition is more realistic than that of perfect competition. (7)

    (Total: 25 marks)

6. a) Describe the interdependence characteristic under oligopoly. (5)

    b) Explain how the price leadership model is used by economists in oligopolistic market structures. Support your answer with a diagram. (10)

    c) What is collusion and why is it important? Mention **TWO** factors that can create problems within a collusive agreement. (10)

    (Total: 25 marks)

Section B

Answer TWO questions from this Section.

7. a) Define GDP and describe the different methods which can be utilized to measure GDP within a national accounting framework. (7)

    b) The Covid-19 pandemic has led to a simultaneous decline in household consumption expenditure and decline in the exports of goods and services. Based on your understanding of the circular flow of income for an open economy, how would these two factors affect the level of gross national income? (9)

    c) Discuss the effect and importance of technological progress and the quality of labour within the context of the process of long run economic growth. (9)

    (Total: 25 marks)

8. a) Explain, by making use of the appropriate diagram, the economic relationship put forward by the Keynesian consumption function and describe **TWO** factors that can cause this function to shift upwards. (9)

    b) What determines aggregate investment behaviour? Discuss. (7)

    c) A policy instrument which can be implemented to offset the negative economic impact of the Covid-19 pandemic is that of an expansionary fiscal policy. Explain, by making use of the appropriate diagram, how such a policy could lead to an inflationary gap. (9)

    (Total: 25 marks)

9. a) Describe **THREE** motives for holding money. (7)

    b) What is credit creation and how does it work? How does an increase in the reserve ratio affect the cost of credit? (9)

    c) Explain, with the aid of the appropriate diagram, what would be the impact on the equilibrium interest rate in the economy in the eventuality of the central bank implementing contractionary open market operations. (9)

    (Total: 25 marks)

10. a) Describe how a Consumer Price Index, such as the HICP or RPI, is constructed and explain which of these two indicators would you assess to compare inflation in Malta with that of other EU countries. (7)

    b) Explain, by using examples **THREE** types of unemployment and provide **ONE** example of a policy that can be used to reduce each type. (9)

    c) Utilize the AS-AD model to explain the impact of a supply side shock, such as an increase in the price of oil, on the equilibrium level of output and price level of the economy. Subsequently, put forward **ONE** example of a supply-side policy that could be implemented by government in order to offset the impact of such a supply-side shock. (9)

    (Total: 25 marks)

11. a) What role do automatic stabilisers play within the context of the overall management of the national economy? (8)

    b) How do merit goods differ from public goods? Why do governments provide merit goods and services? Provide **ONE** example of a merit good. (8)

    c) Explain what is implied by a government budget deficit. Discuss the way in which the difference between a government budget deficit differs from the level of national debt, and comment on whether a high level of national debt can have any impact on a government's budget. (9)

    (Total: 25 marks)

Please turn the page.

12. a) Define 'balance of payments'. What are its **THREE** components? (7)

   b) Describe **THREE** methods that can be implemented by policy makers in order to restrict trade and provide **THREE** motives as to why policy makers would want to implement such policies? (9)

   c) The EU single market is one of the foundations and main achievements of European integration. Discuss the benefits and challenges of the single market. (9)

(Total: 25 marks)

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EXAMINATIONS BOARD

**ADVANCED MATRICULATION LEVEL
2021 SECOND SESSION**

SUBJECT:	**Economics**
PAPER NUMBER:	II
DATE:	5th October 2021
TIME:	4:00 p.m. to 7:05 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. The following equation represents the demand for a stylish diamond ring:

    QD = 22500 − 1.5 PD + PS + 0.25 Y

    QD is quantity demanded;
    PD is the average price of the good itself;
    PS is the average price of a substitute good; and
    Y is average personal income.

    a. Plot the demand curve by assuming that PS is equal to €3,750, Y is equal to €5,000, and the price PD takes a value from €2,000 up to €6,000. Does the demand function conform to the law of demand? Explain your answer. (6)

    b. By assuming that PS is equal to €3,750 and Y is equal to €5,000, find the elasticity of demand with respect to price PD when PD is equal to (i) €4,000 and (ii) €6,000. Explain how the price elasticity of demand changes with the price level. (7)

    c. If Y increases to €10,000, would you expect any changes in the price elasticity of demand when PD is equal to €4,000 and €6,000? If no, why? If yes, discuss the changes between the elasticities. (6)

    Suppose that the supply equation for the same good is:

    Qs = 900 + 3 PD + T;

    Qs is quantity supplied;

    PD is the average price of the good itself; and

    T is an index of technology.

    d. Assuming that T takes the value of 5000 and the price PD takes a value from €2,000 up to €6,000, plot the supply curve on the same graph paper where you plotted the demand curve. Find the equilibrium price and quantity. (6)

    e. Mention and discuss **FOUR** factors that determine the demand of diamond rings and **FOUR** factors that determine the supply of the same good. (8)

    (Total: 33 marks)

    Please turn the page.

2. A talented craftsman producing small-sized church statues faces the following average cost and average revenue table:

Output (Church Statues)	Average Cost (€)	Average Revenue (€)
1	80.64	150.00
2	75.60	147.00
3	74.34	144.00
4	75.60	141.00
5	79.41	138.00
6	86.16	135.00
7	96.00	132.00
8	108.60	129.00
9	123.33	126.00
10	139.86	123.00

a. Construct a table to show the Total Cost (TC), Marginal Cost (MC), Total Revenue (TR) and Marginal Revenue (MR) at each level of output. (8)

b. Plot the Average Cost (AC) and the Average Revenue (AR) curves on the same graph. On a separate graph, plot the Marginal Revenue (MR) and the Marginal Cost (MC) figures in curves. (6)

c. At which level of output should the firm produce? How much profit will the firm earn in this case? Use your answer to part (b) to highlight the area which represents the profit made by the firm if it decides to produce at this level of output. (6)

d. Discuss what would happen if the price of one of the factors of production decreases and, at the same time, the firm invests in new technology that increases productivity. (6)

e. Discuss the differences in the Average Revenue (AR) curve between perfect and imperfect competition. (7)

(Total: 33 marks)

3. The following table shows the relationship between labour and capital used to produce output per week in a factory.

Output Unit	Labour Unit	Capital Unit
1500	20	200
2400	40	200
5270	60	200
9000	80	200
13130	100	200
17280	120	200
20580	140	200
23040	160	200
24930	180	200
26500	200	200
27670	220	200
28500	240	200
29250	260	200

The price of labour is €3,500 per unit while the price of capital is €3,000 per unit.

a. Construct a table for the average and marginal cost curves, and plot them. (7)

b. Construct a table for the total cost, variable cost and fixed cost curves, and plot them. (9)

Suppose that this factory operates in a perfectly competitive market where the market price is €60 per unit of output.

c. At what level of output will the firm produce? What would be the profit in this case? Is this level of output likely to be maintained over the long-run? Explain your answer. (6)

d. What happens if the factory obtains a patent on its product? Is this outcome expected to differ between the short- and the long-run? Explain your answer. (5)

e. Suppose that the factory starts experiencing diminished marginal costs as a result of technological advancement. Does this change the equilibrium price and profits? Discuss. (6)

(Total: 33 marks)

SECTION B

4. On 7th January 2021, the National Statistics Office (NSO) published a press release on the gainfully occupied population as at April-May 2020. On the basis of administrative data collected by Jobsplus, it was reported that, over a period of one year to May 2020, the labour supply (excluding part-timers) increased by 7.9 percent, reaching 235,309. This was mainly attributed to a year-on-year increase in full-time registered employment (14,447) and an increase in registered unemployment (2,740).

The increase in full-time employment was brought about by administrative and support services activities and human health and social work activities, with 3,292 and 1,928, respectively. Registered full-time employment in the private sector went up by 12,884 persons to 181,396. Public sector full-time employment increased by 1,563 persons to 49,504.

The number of persons registered as full-time self-employed rose by 2,523 when compared to May 2019, while the number of persons registered as employees increased by 11,924. Full-time employment for males and females went up by 6.3 percent and 7.3 percent respectively over 2019 levels.

In another NSO press release, it was reported that the number of persons registering for work stood at 4,409, increasing by 2,740 when compared to the same corresponding month in 2019. Registered unemployment levels increased across all age groups. The largest share of males and females on the unemployment register sought occupations as clerical support workers, with 20.4 percent and 33.1 percent respectively.

Reference: National Statistics Office, Malta, News Release dated 7th January 2021

a. What role does Jobsplus play in the economy? Why do unemployed persons register with Jobsplus? (6)

This question continues on next page.

b. The labour supply increased because of an increase in full-time registered employment and an increase in registered unemployment. Explain why these two factors affect the labour supply, and give an example of **each** factor. (6)

c. It was reported that the number of persons registering for work stood at 4,409, increasing by 2,740. What might have led to this pronounced increase? Can Malta experience zero employment? Discuss. (8)

d. The increase in full-time employment was brought about by administrative and support services activities and human health and social work activities, with 3,292 and 1,928, respectively. What could explain these increases? Discuss and give examples. (6)

e. During 2020, the Maltese Government announced a series of measures to safeguard jobs. Briefly outline **TWO** such measures and discuss the economic rationale behind them. (7)

(Total: 33 marks)

5. In 2020, the European Commission expects a deficit in the general government balance of 9.4 percent of GDP, from a surplus of 0.5 percent in 2019. This is mainly due to a fall in government revenue emanating from lower household consumption, falling income tax revenues and lower revenues from Malta's citizenship scheme for foreigners. At the same time, the measures implemented by the Maltese government to mitigate the negative impact of the COVID-19 pandemic will markedly increase government spending in 2020.

In 2021, an improving economic environment is expected to support revenues and contribute to a decline in deficit to around 6 percent of GDP. Assuming no changes in policies, the deficit is forecast to decline further in 2022 to just below 4 percent of GDP.

The government debt-to-GDP ratio is set to surge to around 55 percent in 2020 and further to 60 percent in 2021 before declining to around 59 percent in 2022, mainly due to a swift growth of nominal GDP.

Reference: European Commission (2020). Autumn 2020 Economic Forecast.

a. Why does the European Commission produce fiscal forecasts of the Maltese economy? Are there any fiscal rules which Malta must adhere to? According to these forecasts, is Malta in line with these rules? Explain in detail. (9)

b. Briefly discuss **THREE** measures implemented by the Maltese government to mitigate the negative impact of the COVID-19 pandemic and explain why these contribute to a general government deficit. (9)

c. Lower household consumption, falling income tax revenues and lower revenues from Malta's citizenship scheme for foreigners are expected to decrease government revenue. Explain the reasons why the European Commission is expecting lower household consumption, falling income tax revenue and lower revenues from Malta's citizenship scheme for foreigners and discuss their effect on the general government balance. (9)

d. Discuss ways how the Maltese Government can reduce its deficit and whether any of these are preferable. (6)

(Total: 33 marks)

6. 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. The table below highlights the monetary aggregates according to the December 2020 release:

MONETARY AGGREGATES (€ million)	NOV-20	NOV-19
Currency issued	1,348.5	1,226.2
Overnight deposits	16,893.4	15,939.9
Deposits redeemable at notice up to 3 months	124.0	98.3
Deposits with agreed maturity up to 2 years	3,760.8	3,571.9
Marketable instruments	12.5	68.8

Reference: Central Bank of Malta (Dec, 2020). The Contribution of Resident MFIs to the Euro Area Monetary Aggregates

a. Compute the value of:

   i. Narrow Money (M1); (3)

   ii. Intermediate Money (M2); (3)

   iii. Broad Money (M3). (3)

b. Define marketable instruments. Give **TWO** examples. (6)

c. On 1st January 2008, Malta officially adopted the euro. Thus, the Central Bank of Malta became a member of the euro area 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)

d. Is it likely for the ECB to increase interest rates in the coming months? Discuss. (6)

e. Briefly discuss the relationship between interest rates and economic growth. (6)

(Total: 33 marks)