## INTERMEDIATE MATRICULATION LEVEL 2021 SECOND SESSION

| SUBJECT: | Economics |
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| DATE: | $9^{\text {th }}$ October 2021 |
| TIME: | $4: 00$ p.m. to $7: 05$ p.m. |

The question in Section A, is compulsory. In addition, answer TWO questions from Section B and TWO questions from Section C.

Section A carries a total of 20 marks, while Section B and Section C each carry a total of 40 marks. The paper is marked out of 100 marks.

## SECTION A

This question is compulsory and carries 20 marks.

1. In the mid-1990s William Nordhaus, an economist at Yale University, looked at two ways of measuring the price of light over the past two centuries. You could do it the way someone calculating GDP would do: by adding up the change over time in the prices of the things people bought to make light. On this basis, he reckoned, the price of light rose by a factor of between three and five between 1800 and 1992. But each innovation in lighting, from candles to tungsten light bulbs, was far more efficient than the last. If you measured the price of light in the way a cost-conscious physicist might, in cents per lumen-hour, it plummeted more than a hundredfold.
Mr Nordhaus intended this example to illuminate a general point about how flawed economists' attempts to measure changes in living standards are. Any true reckoning of real incomes must somehow account for the vast changes in the quality of things we consume, he wrote. In the case of light, a measurement of inflation based on the cost of things that generated light and one based on a quality-adjusted measure of light itself would have differed by 3.6\% a year.
(Extract from 'The trouble with GDP', The Economist, 2016)
a. The extract refers to the different ways of calculating GDP. Mention and explain the THREE methods that are used to measure GDP.
b. How does GDP affect the standard of living?
c. Explain why William Nordhaus considers the methods to measure GDP as 'flawed'.
d. Other than the reason mentioned in question C, list THREE other reasons why the GDP is not considered a good measure of standard of living.
(Total 20 marks)

## SECTION B

Answer any TWO questions in detail. Each question carries 20 marks.
2. House prices are soaring throughout the world in the wake of the coronavirus pandemic. For example, in the UK, house prices are $7.6 \%$ higher compared to last year. In the USA, house prices increased by over 15\% between April and June 2021 compared to the same three months of 2020. The reason for this house price inflation is that demand is rising much faster than supply.
a. Use a supply and demand diagram to illustrate what has been happening to the housing market in many major economies.
b. Explain why the price elasticity of supply is relatively inelastic.
c. Explain and illustrate with diagrams the importance of the price elasticity of supply in the process of price determination.
d. Describe ONE possible situation when the price elasticity of supply will be expected to become less inelastic.
(Total: 20 marks)
3. a. Briefly describe the factors of production.
b. Using a correctly labelled production possibility frontier diagram, show and explain the problem of scarcity of resources, and the opportunity costs of choices when a country is faced with the possibility of producing two goods.
c. By referring to question 3 b , briefly discuss the consequences if there is an increase in the country's productive potential.
(Total: 20 marks)
4. The following table provides information of demand and supply of cars for given price levels.

| Table 1: Demand and Supply Schedule |  |  |
| :---: | :---: | :---: |
| Price per unit <br> (in thousands) Demand Supply <br> 5 70 10 <br> 10 60 30 <br> 15 50 50 <br> 20 40 70 <br> 25 30 90 |  |  |

a. Plot, on a single diagram, the demand and supply curves.
b. Define the terms 'equilibrium price' and 'equilibrium quantity'. Find the equilibrium price of cars and equilibrium quantity of cars.
c. What is the excess demand and or excess supply of cars when the price per unit is at:

$$
\begin{equation*}
\text { i. } € 5 \text {; and } \tag{2}
\end{equation*}
$$

ii. €20.
d. Assume that there is a general increase in income, and demand for cars rises by 30 units at each price level. Describe the new equilibrium price after the change in demand.
e. Mention TWO factors, other than income, that could have resulted in an increase in demand for cars.
(Total: 20 marks)
5. The following information refers to the costs of a small firm in Valletta for an average week. The firm's output is 1,000 units per week.

Table 2: Cost Schedule

| Costs | C |
| :--- | :--- |
| One Salaried Manager | 1,000 |
| Ten wage earners at | 200 per week |
| Raw materials | 200 |
| Interest on loans | 100 |
| Rent | 100 |
| Electricity | 50 |

a. Define each of the terms below and calculate a weekly estimate of each for the firm under consideration:
i. fixed costs;
ii. variable costs; and
iii. average fixed and variable costs.
b. Explain why in the short run, adding more employees results in lower productivity.
c. Explain why economies of scale can give larger firms a competitive advantage over small firms.

## SECTION C

Answer any TWO questions in detail. Each question carries 20 marks.
6. Below you are provided with the schedule for the Aggregate Demand (AD) and Aggregate Supply (AS).

Table 3: Aggregate Demand and Aggregate Supply

| Price Level | Aggregate Demand <br> (€ million) | Aggregate Supply <br> (€ million) |
| :---: | :---: | :---: |
| 80 | 12 | 4 |
| 90 | 10 | 16 |
| 100 | 8 | 8 |
| 110 | 6 | 10 |
| 120 | 4 | 12 |

a. Define Aggregate Demand and Aggregate Supply. Using the Table above, identify the macroeconomic equilibrium price level in the economy.
b. What is the difference between the short run aggregate supply (SRAS) and long run aggregate supply (LRAS)? Explain using diagrams.
c. Using diagrams, explain how aggregate demand could be impacted by:
i. an expansionary fiscal policy;
ii. a contractionary fiscal policy.
7. a. Explain the factors which determine the size of the national income multiplier.
b. In a closed economy with no government, a $€ 1$ billion increase in investment leads to a $€ 5$ billion increase in consumption. Calculate the value of the Multiplier.
c. Explain and show with the use a diagram how the multiplier affects aggregate demand.
(Total: 20 marks)
8. a. What is the difference between inflation and deflation? How is inflation measured?
b. Define and explain using diagrams TWO causes of inflation.
c. Identify and explain TWO costs of inflation and TWO costs of deflation.
(Total: 20 marks)
9. a. What is investment? Explain the difference between investment and consumption.
b. Mention and explain THREE factors that affect investment.
c. Define and explain the term Marginal Efficiency of Capital (MEC).
(Total: 20 marks)

