Diploma Programme
Programme du diplôme
Programa del Diploma

Economics
Higher level and standard level
Paper 2

15 May 2024

Zone A afternoon | **Zone B** afternoon | **Zone C** afternoon

1 hour 45 minutes

Instructions to candidates

- Do not open this paper until instructed to do so.
- You are permitted access to a calculator for this paper.
- Unless otherwise stated in the question, all numerical answers must be given exactly or correct to two decimal places.
- You must show all your working.
- Answer one question.
- Use fully labelled diagrams and references to the text/data where appropriate.
- The maximum mark for this examination paper is **[40 marks]**.

2224 – 5105

Answer **one** question.

1. Read the extracts and answer the questions that follow.

Text A — Overview of the United Kingdom (UK)

1 The United Kingdom (UK) is a country in Europe. By early 2022, its economy had recovered from a deep recession. However, there were significant risks ahead. **Inflation** was rising and, as demand management policies to reduce inflation took effect, the growth rate of gross domestic product (GDP) began to slow again.

2 Inflationary pressures were due to rising energy prices, shortages of labour and high government spending. The central bank raised interest rates several times during 2021 and 2022 because inflation rose above the target rate of 2 %. At the same time, the International Monetary Fund (IMF) recommended that government spending on infrastructure, skills and innovation should be increased.

3 Since 2020, the deficit on the current account of the balance of payments has increased. Higher expenditure on imports of manufactured goods, oils and other fuels added to the deficit on the balance of trade in goods.

4 Fluctuations in the exchange rate for the pound (UK£, the UK's currency) are considerable **(Figure 1)**. The overall trend since 2014 has been for export prices (measured in foreign currencies) to decrease. However, the UK export market share in world trade has been gradually declining.

5 Currency depreciation is expected to increase inflows of **foreign direct investment (FDI)** and portfolio investment. However, the effect on the trade balance is less predictable, partly because imported raw materials and components are a large proportion of the cost of exported goods. The demand for UK exports of services, including banking, insurance, and business services, is price inelastic. Other factors such as quality and reputation are usually more important than price in determining demand.

6 In addition, UK manufacturing exports are mainly high technology goods, which are less sensitive to price changes than to other demand factors. For example, the long-run price elasticity of demand (PED) for pharmaceuticals exported from the UK has been estimated to be –0.6, whereas for machinery it is –1.1. In the short run, the PED is lower for all exported goods, averaging –0.15.

7 Changes in the incomes of people overseas are usually more significant in determining export demand than changes in prices. The income elasticity of demand (YED) for most UK exports is positive and can be quite high. For example, the YED is 2.6 for exports of pharmaceuticals. However, the YED is only –0.07 for exports of shoes.

Text B — Free trade agreements with Australia and New Zealand

1 The UK exited the European Union (EU) in 2020. Since then, free trade agreements (FTAs) have been negotiated with Australia and New Zealand. These FTAs will result in the gradual elimination of almost all tariffs. Therefore, some export sectors in the UK economy are predicted to grow, particularly in the areas of "green" technologies and digital services.

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(Question 1 continued)

2 However, it is estimated that the effect of these agreements will increase UK GDP by only 0.11 % per year. While the overall benefit will be small, the negative effect on some industries will be significant. UK farmers are concerned that these FTAs could damage their competitiveness and cause UK agricultural output to fall.

Text C — The net zero strategy in the UK

The UK plans to achieve carbon neutrality by 2050. By 2035, emissions of carbon should be reduced to 22 % of the 1990 levels. As part of the net zero strategy, carbon taxes are being imposed on some goods that damage the environment due to the carbon emissions that occur during production, such as plastic packaging. Consequently, a tax on the production of plastic brings its output closer to the social optimum. In addition, there are incentives to produce innovative "green" goods that benefit the environment and can also be exported.

Table 1: Economic data for the UK

	2011	**2021**
Real GDP per capita (UK£)	27 996	30 246
Unemployment (% of labour force)	8.0	4.5
Inflation (annual % change in consumer price index)	3.9	2.5
Exchange rate (US$ per UK£)	1.61	1.37

Table 2: Selected balance of payments data for the UK (UK£ billion)

	2011	**2021**
Balance of trade in goods	–103	–156
Balance of trade in services		127
Income	6	–12
Current transfers	–21	–19
Current account balance	–32	–60
FDI	34	58
Portfolio investment	–10	–25
Reserve assets	–5	18

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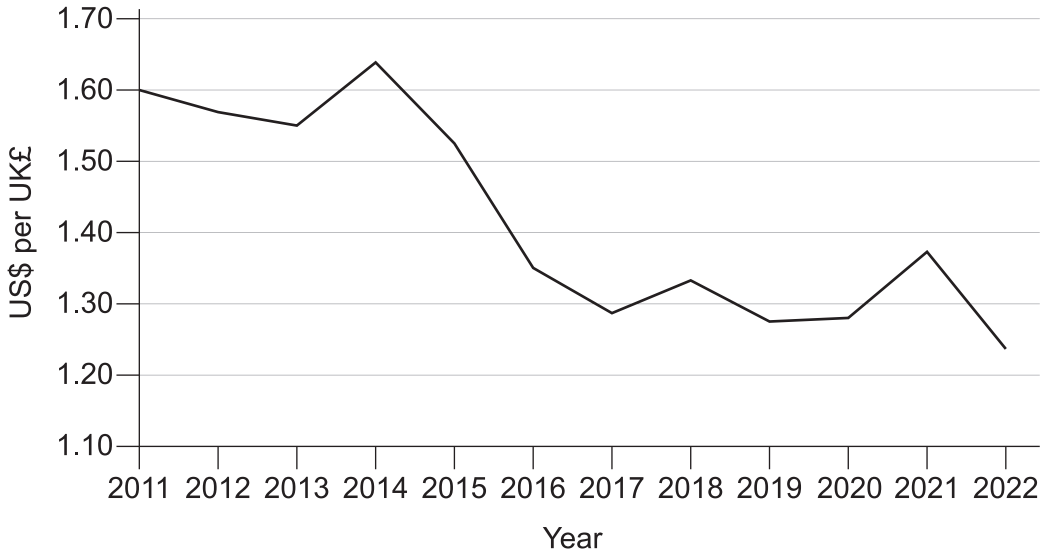
(Question 1 continued)

Figure 1: Exchange rate from 2011 to 2022 (US$ per UK£)



(a) (i) Define the term *inflation* indicated in bold in the text (**Text A**, paragraph **1**). [2]

(ii) Define the term *foreign direct investment* indicated in bold in the text (**Text A**, paragraph **5**). [2]

(b) A pharmaceutical good is priced at UK£10 per unit and the exported quantity is 200 units. The price decreases to UK£9.

(i) Using the price elasticity of demand figure for pharmaceuticals exported from the UK (**Text A**, paragraph **6**), calculate the revenue earned in UK£ after the price change. [3]

(ii) Using information from **Table 2**, calculate the balance of trade in services (UK£ billion) for the UK in 2011. [2]

(c) Using an AD/AS diagram, explain the likely effect on the full employment (potential) level of output in the UK if government spending on infrastructure is increased (**Text A**, paragraph **2**). [4]

(d) Using an exchange rate diagram, explain the likely effect on the exchange rate for the pound (UK£) of increased international demand for "green" goods produced in the UK (**Text C**). [4]

(e) Using an international trade diagram, explain how imports of agricultural goods to the UK are likely to change as a result of the free trade agreements with Australia and New Zealand (**Text B**, paragraph **2**). [4]

(f) Using an externalities diagram, explain why a carbon tax on the production of plastic could cause its output to move closer to the social optimum (**Text C**). [4]

(g) Using information from the text/data and your knowledge of economics, discuss the likely effects of the exchange rate trend from 2011 to 2022 (shown in **Figure 1**) on the UK balance of payments and the UK economy. [15]

2. Read the extracts and answer the questions that follow.

Text D — Overview of the Philippines

1 The Philippines is a country in the Asia–Pacific region. Growth rates of gross domestic product (GDP) in the 2020s are expected to average 5 % per year. With increasing urbanization, a growing middle class and a large, young population, the Philippines' economic growth is based on strong consumer demand.

2 Although the primary sector is still important, there is stronger growth in the services sector, including tourism and insurance. Remittances from overseas workers also contribute a lot to national income.

3 The government has made progress in reducing poverty, partly due to policies that encourage workers to leave agriculture for higher wage jobs in other sectors. However, poverty reduction is proceeding slowly, with more than 70 % of the labour force still working in low-wage jobs in the **informal economy**. The Philippines is vulnerable to natural disasters, such as earthquakes and droughts, which damage the economy and most severely affect the poor who work in farming and fishing. Fish stocks are falling due to illegal fishing and climate change. Agricultural productivity is low and unsustainable practices have caused deforestation.

4 Infrastructure and public services, including health care and education, are inadequate in many rural areas and there is poor nutrition in low-income households. Rising food and fuel prices will further reduce real incomes. For the lowest income earners, food amounts to 60 % of total expenditure, while the highest income earners spend only 28 % on food. This can be explained by the low-income elasticity of demand (YED) for food.

5 An expansionary fiscal policy has caused a persistent budget deficit. Higher global energy prices and the **depreciation** of the peso (₱HP, the Philippine currency) have added to inflationary pressures. In response, the central bank raised its interest rate several times, from 2 % in 2021 to 5.5 % in 2022.

6 The Philippines has experienced more free trade in agricultural goods following its membership of the ASEAN economic community (a free trade area). For example, a quota on pork imports into the Philippines has been removed.

7 However, to help local farmers, a 35 % tariff has been placed on rice imported into the Philippines, even though rice and other cereals account for a large proportion of imports. Tariff revenues are used to provide subsidies for modern farm equipment, seeds and training for rice farmers. The aim is to create a more efficient and competitive agricultural sector.

Text E — Reduction of poverty rates in the Philippines

1 In order to achieve the first Sustainable Development Goal (SDG), the government of the Philippines aims to eliminate extreme poverty by 2040. In 2019, taxes were increased on tobacco, alcohol and e-cigarettes, partly to fund an expansion of the public health care system.

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(Question 2 continued)

2 Another programme provides regular cash payments to mothers, conditional on their children regularly attending school and receiving preventive health check-ups. Therefore, it is reducing poverty, improving human capital and increasing gender equality. According to a World Bank study, the Philippines' programme is one of the most efficient social support systems in the world: it costs only 0.4 % of GDP, yet covers nearly 20 million people.

3 The government gives fuel subsidies to private bus drivers who provide transport in rural areas. In addition, the bus drivers are asking for an increase in the legal minimum price that they charge passengers, although the minimum (floor) price is already above the equilibrium price.

Text F — Infrastructure and job creation in the Philippines

Infrastructure in the Philippines, including infrastructure related to information technology, is being improved, in order to create jobs and connect the poor to more opportunities and basic services. Many projects are financed by Official Development Assistance (ODA), which includes loans and grants. The ODA funding also supports programmes for youth employment and for improving skills. Training is provided for priority areas: agricultural businesses, construction, information technology, management, tourism, and firms run by women entrepreneurs.

Table 3: Economic data for the Philippines

	2012	**2021**
Real GDP per capita (₱HP)	127 000	163 000
Real gross national income (GNI) per capita (₱HP)	141 000	168 000
Inflation (annual % change in consumer price index)	3.0	3.9
Unemployment (% of labour force)	3.5	2.4
Exchange rate (₱HP per US$)	42.23	49.25

Table 4: Development data for the Philippines

	2012	**2021**
Population (million)	97	111
Absolute poverty (% of population)	10.9	3.0*
Gini coefficient	0.465	0.441
Human Development Index (HDI)	0.644	0.699
HDI ranking out of 191 countries	111	116

* estimate

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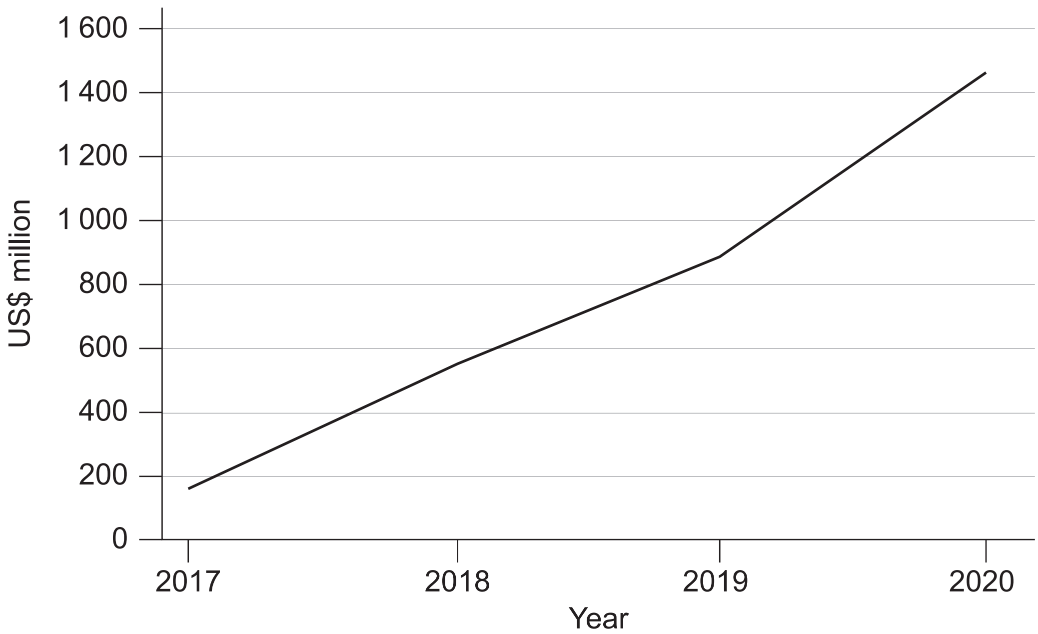
(Question 2 continued)

Table 5: Selected national income items for the Philippines in 2022*

	₱HP billion
Consumption	
Investment	3780
Government spending	3700
Exports of goods and services	5400
Imports of goods and services	7780
GDP	19 700

* estimate

Figure 2: Net official development assistance (ODA) received by the Philippines from 2017 to 2020 (current US$ million)



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(Question 2 continued)

(a) (i) Define the term *informal economy* indicated in bold in the text (**Text D**, paragraph **3**). [2]

(ii) Define the term *depreciation* indicated in bold in the text (**Text D**, paragraph **5**). [2]

(b) (i) Using information from **Table 5**, calculate the value of consumption (₱HP billion) in the Philippines in 2022. [2]

A low-income household in the Philippines earned ₱HP 40 000 annually in 2021. Its annual income increased to ₱HP 42 000 in 2022. Its annual demand for rice increased from 250 kilograms (kg) to 256 kg between 2021 and 2022.

(ii) Calculate the income elasticity of demand for rice for this household. [2]

(iii) Using your answer to (b) (ii), identify whether rice is an inferior or a normal good. [1]

(c) Using an AD/AS diagram, explain the likely effect on the Philippines’ real GDP as a result of higher global energy prices (**Text D**, paragraph **5**). [4]

(d) Using an international trade diagram, explain the likely effect on the domestic production of pork when the quota on pork imports into the Philippines was removed (**Text D**, paragraph **6**). [4]

(e) Using an exchange rate diagram, explain the likely effect on the exchange rate for the peso (₱HP) of the tariff on rice imports (**Text D**, paragraph **7**). [4]

(f) Using a demand and supply diagram, explain what is likely to happen to excess supply if the minimum (floor) price charged by private bus drivers is raised further above the equilibrium price (**Text E**, paragraph **3**). [4]

(g) Using information from the text/data and your knowledge of economics, evaluate the policies used in the Philippines to reduce poverty and income inequality. [15]

Disclaimer:

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