Diploma Programme
Programme du diplôme
Programa del Diploma

Economics
Higher level
Paper 3

10 November 2025

Zone A morning | **Zone B** morning | **Zone C** morning

Candidate session number

1 hour 45 minutes

Instructions to candidates

- Write your session number in the boxes above.
- You are permitted access to a calculator for this paper.
- Do not open this examination paper until instructed to do so.
- Answer all the questions.
- Answers must be written within the answer boxes provided.
- 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.
- Use fully labelled diagrams where appropriate.
- The maximum mark for this examination paper is **[60 marks]**.

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Answer **all** the questions. Answers must be written within the answer boxes provided.

1. **Table 1** shows the gross domestic product (GDP) of the United States of America (USA) economy from 2020 to 2023. The USA is not the fastest growing economy in the world, but it is the largest. It also has the largest budget deficit and the largest current account deficit in the world. As a result, the actions of its central bank, the Federal Reserve, always make news.

Table 1

	2020	**2021**	**2022**	**2023**
Real GDP in billions of USA dollars (USD)	20724	21847	21989	22668
Economic growth rate (%)	—	5.42	0.65	

(a) (i) Using **Table 1**, calculate the annual GDP growth rate for 2023. Enter your result in **Table 1**. [1]

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(Question 1 continued)

The Federal Reserve has a target inflation rate of 2%.

The US Bureau of Labor Statistics, however, recorded that the inflation rate from January 2023 to January 2024 was 3.1%, well above the target rate. Over the same period, households in the USA could borrow money from a commercial bank at a nominal interest rate of 8.5%.

(ii) Calculate the real interest rate for households between January 2023 and January 2024. [1]

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(iii) Explain how commercial banks create money. [4]

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(Question 1 continued)

To try and achieve the macroeconomic goals of monetary policy, the Federal Reserve significantly increased the money supply in the USA between 2008 and 2023. It also conducted four rounds of quantitative easing from 2008, totalling USD 8900 billion.

(iv) Outline what is meant by the term quantitative easing. [2]

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(v) Sketch a diagram to show how an increase in the money supply is expected to affect the equilibrium interest rate. [2]

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(Question 1 continued)

Table 2 shows the current account and capital account of the balance of payments, quarterly, for the USA in 2023. It shows that the USA has a persistent current account deficit, and that the main component of that deficit is the balance of trade in goods and services. The country's relatively high labour costs, labour unions and skills shortages in STEM (science, technology, engineering and mathematics) all contribute to the trade deficit.

Table 2

	2023			
	Quarter 1 (Q1)	**Quarter 2 (Q2)**	**Quarter 3 (Q3)**	**Quarter 4 (Q4)**
Current account				
Exports of goods and services (USD billion)	1152	1142	1178	1180
Imports of goods and services (USD billion)	1365	1357	1374	1375
Net income (USD billion)	31	32	37	36
Net current transfers (USD billion)	–44	–45	–47	–39
Capital account (USD billion)	–6	–3	–2	–2

(vi) Using **Table 2**, calculate the deficit or surplus in the balance of trade in goods and services for Quarter 3 (Q3) only. [1]

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(vii) Using **Table 2**, calculate the size of the financial account for Quarter 4 (Q4) only. [3]

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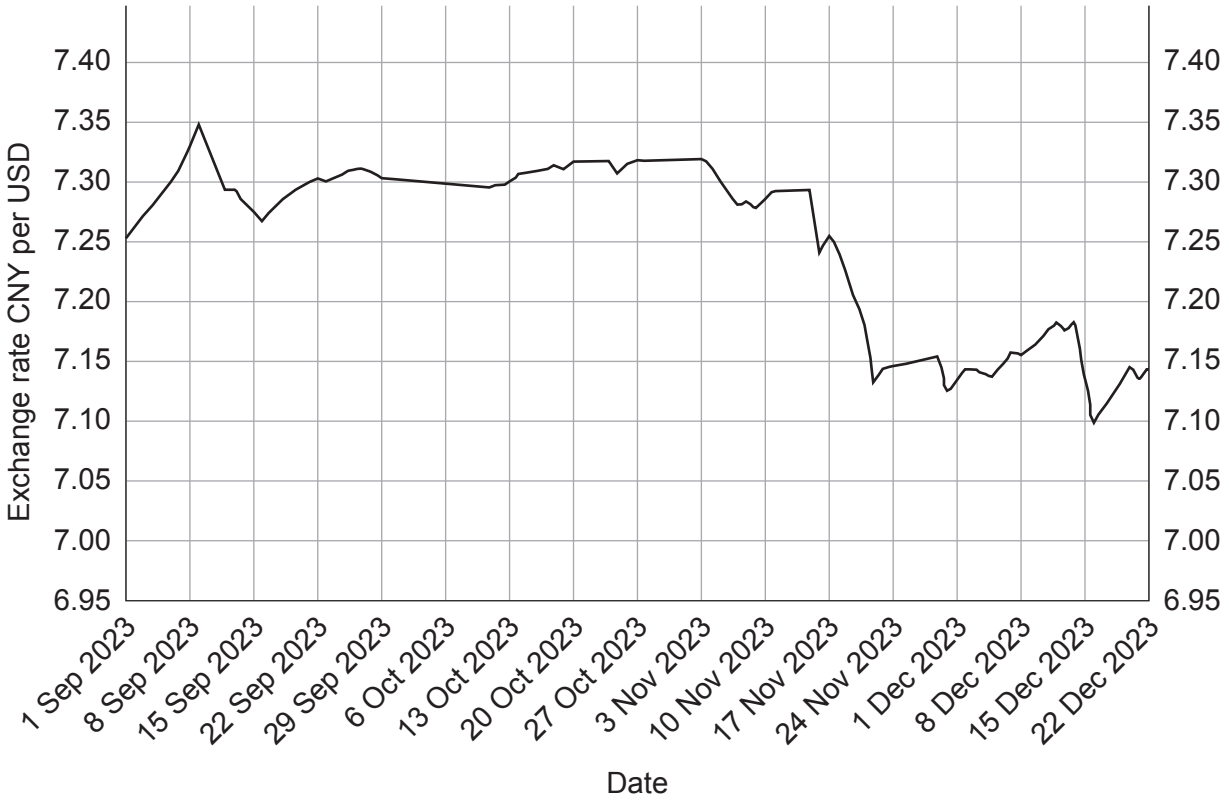
(Question 1 continued)

The USA recorded a trade deficit of USD 819 billion in 2023. This was a slight reduction from 2022, when it was USD 951 billion. One of the reasons for the fall in the trade deficit could be the exchange rate. In the final four months of the year, the USD depreciated against the Chinese Yuan (CNY). China is the USA's largest trading partner, even though recent trade relations between the two countries have been characterized by tariffs and retaliatory measures. **Figure 1** shows the price of the USD in terms of the CNY from September to December 2023.

Figure 1



(viii) Using **Figure 1**, calculate the percentage change in the value of the USD in terms of the CNY from its highest point in September 2023 to its lowest in December 2023. [2]

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(Question 1 continued)

(ix) Using an AD/AS diagram, explain why a depreciating dollar may lead to demand-pull inflation in the USA. [4]

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(Question 1 continued)

Economists and policymakers hold different views on how the current account deficit affects the USA's economy. Some highlight positive outcomes, suggesting that, as the economy grows, citizens can enjoy increased access to goods and services from abroad. Others express concerns about potential negative consequences, including fewer job opportunities and slower economic growth.

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(Question 1 continued)

(b) Using the text/data provided and your knowledge of economics, recommend a policy that the government of the USA could introduce to correct its persistent current account deficit, without intervention in foreign exchange markets. [10]

2. Indonesia is a middle-income country in southeast Asia. Its main agricultural exports are palm oil and coffee, which Malaysia also produces. The maximum amount of each good that Indonesia and Malaysia can produce in one hour is shown in **Table 3**.

Table 3

	Palm oil (kg)	**Coffee (kg)**
Indonesia	15	20
Malaysia	10	10

(a) (i) Using the information in **Table 3**, determine which country has a comparative advantage in producing coffee. [2]

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(Question 2 continued)

(ii) Using the information in **Table 3** and assuming constant costs, sketch a fully labelled diagram of the production possibilities curves (PPCs) for Indonesia **and** for Malaysia. [2]

(iii) Explain **two** reasons why it might not be in Indonesia's best interests to specialize and trade according to the theory of comparative advantage. [4]

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(Question 2 continued)

Indonesia's policy goals of reducing both poverty and carbon emissions, which cause climate change, are often in conflict with each other. Indonesia's palm oil industry provides employment and income as well as cheap cooking oil for low-income households. However, deforestation for palm oil plantations results in substantial losses of carbon-rich tropical forests.

According to the World Bank, improved land use, notably by reducing deforestation, is lowering carbon emissions. Data can be used to demonstrate that the largest tropical forests could be protected with only a small reduction in profit.

Table 4 shows costs and revenue, in thousands of Indonesian rupiah (IDR), for a firm that produces palm oil in Indonesia. When the quantity of palm oil is cut from its profit-maximizing level to its socially optimum level of output, the fall in profit is only 4.05 %.

Table 4

Quantity (kg)	Price per kg	Total revenue (TR)	Total cost (TC)	Profit		Marginal (private) cost (MC)	Marginal social cost (MSC)	Marginal social benefit (MSB)
3	20	60	6	—		—	—	—
4	18	72	7	65		1	15	18
5	16	80	9	71		2	16	16
6	14	84	12	72		3	17	14
7	13	91	17	74		5	19	13
8	12	96	25	71		—	22	12

(iv) Using **Table 4**, outline the reason why the palm oil market is not perfectly competitive. [2]

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(Question 2 continued)

(v) Using **Table 4**, calculate the profit when output is 3 kg. [1]

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(vi) Using **Table 4,** calculate the marginal (private) cost (MC) when output increases from 7 kg to 8 kg. [1]

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The marginal social cost (MSC) is assumed to include an external cost of IDR 14 000 in addition to the marginal (private) cost (MC). Marginal social benefit (MSB) is equal to the price under the assumption that the price reflects diminishing marginal utility.

(vii) Using **Table 4**, identify the level of output when social/community surplus is maximized. [1]

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(Question 2 continued)

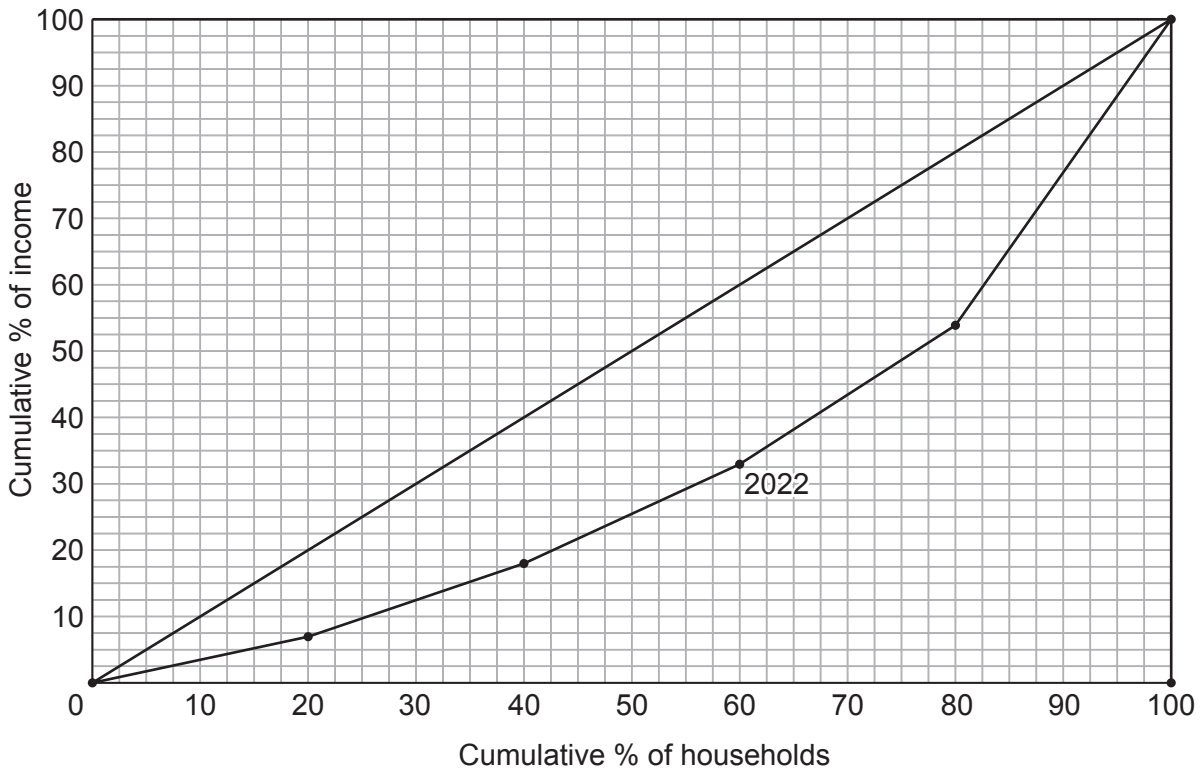
Table 5 shows Indonesia's income distribution according to the share of total income earned by households, ranked by income level.

Table 5

	2000 (%)	**2022 (%)**
Income share held by lowest 20 % of households	10	7
Income share held by second 20 % of households	14	11
Income share held by third 20 % of households	16	15
Income share held by fourth 20 % of households	22	21
Income share held by highest 20 % of households	38	46

(viii) Using the information in **Table 5**, construct a labelled Lorenz curve for the year 2000 on **Figure 2**. [2]

Figure 2



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(Question 2 continued)

(ix) Explain **two** possible causes of income inequality in Indonesia. [4]

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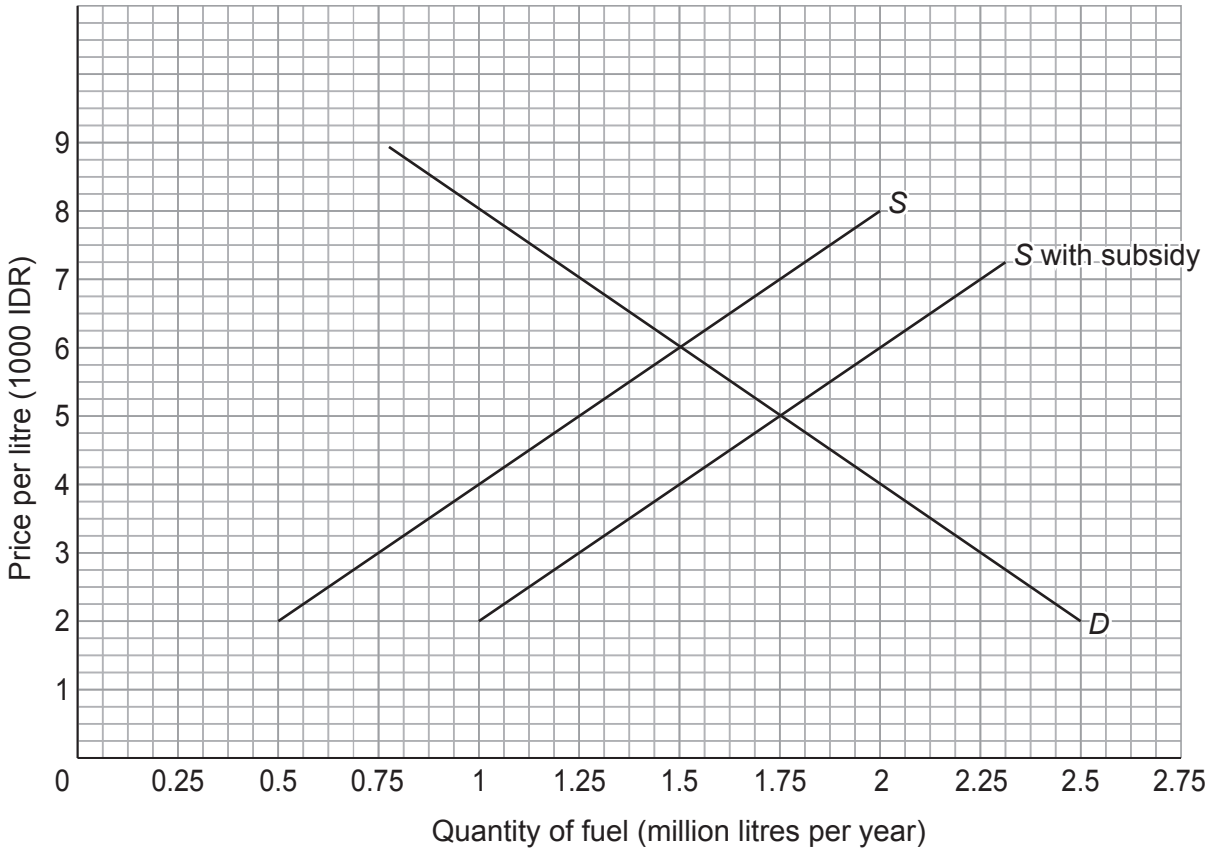
(Question 2 continued)

The Indonesian government has been providing producers with fossil fuel subsidies to support low-income households, who use kerosene for heating and cooking. However, subsidies are gradually being replaced with cash transfer payments to households, with the aim of reducing both carbon emissions and poverty. Furthermore, removing the subsidies completely would release funds for government spending on health and education.

Figure 3 illustrates a market for fuel in Indonesia. *S* is the supply of fuel after a subsidy is removed and *D* is the demand. The market price with the subsidy is IDR 5000 per litre.

Figure 3



(x) Using **Figure 3**, calculate the total welfare loss, in billions of IDR, as a result of the subsidy. [1]

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(Question 2 continued)

The extent to which the removal of the subsidy would affect the quantity used depends on the price elasticity of demand (PED) for fuel. **Figure 3** shows that when the price rises from IDR 5000 to IDR 6000 per litre, the PED is calculated to be 0.71.

There are other issues and data (see **Table 6**) relevant to the reduction of carbon emissions in Indonesia:

- The car ownership rate is expected to remain low, at around 10 % of the population. Therefore, public transport and electric bicycles are essential for efficiency. The World Bank suggests that the promotion of low-carbon transport would deliver not only economic growth but also other benefits, such as lower congestion and less pollution.
- The Asian Development Bank argues that Indonesia's carbon tax, which is only USD 2.10 per ton of carbon dioxide emissions, will not have a significant market impact.
- There is insufficient investment in renewable energy sources. Consequently, most electricity continues to be generated with low-cost coal.

Table 6

	2000	**2005**	**2010**	**2015**	**2022**
Real gross domestic product (GDP) per capita growth (annual %)	3.41	4.37	4.90	3.72	4.64
Carbon dioxide emissions per capita (tons)	1.19	1.39	1.61	1.77	2.48
Gini coefficient	0.295	0.341	0.372	0.404	0.379

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(Question 2 continued)

(b) Using the text/data provided and your knowledge of economics, recommend a policy that the Indonesian government could adopt to reduce carbon emissions. [10]

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References:

Table 1 Federal Reserve Bank of St. Louis, n.d. *Real Gross Domestic Product*. [online] Available at: https://fred.stlouisfed.org/series/GDPC1 [Accessed 27 March 2024]. Source adapted.

Table 2 Bureau of Economic Analysis, n.d. *International Transactions*. [online] Available at: https://www.bea.gov/news/2024/us-international-transactions-4th-quarter-and-year-2023 [Accessed 27 March 2024]. Source adapted.

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Table 4 Stolle, F., Austin, K. and Payne, O., 2015. Having it All: Indonesia Can Produce Palm Oil, Protect Forests and Reap Profits. *World Resources Institute*. [online] Available at: https://www.wri.org/blog/2015/07/having-it-all-indonesia-can-produce-palm-oil-protect-forests-and-reap-profits [Accessed 27 February 2024]. Source adapted.

Table 5 The World Bank Group, n.d. *World Development Indicators*. [online] Available at: https://databank.worldbank.org/source/world-development-indicators [Accessed 12 March 2024]. Source adapted.

Figure 2 The World Bank Group, n.d. *World Development Indicators*. [online] Available at: https://databank.worldbank.org/source/world-development-indicators [Accessed 13 March 2024]. Source adapted.

Figure 3 Asian Development Bank, 2015. *Fossil Fuel Subsidies in Indonesia: Trends, Impacts, and Reforms*. [PDF online] Available at: https://www.adb.org/sites/default/files/publication/175444/fossil-fuel-subsidies-indonesia.pdf [Accessed 26 February 2024]. Source adapted.

Table 6 The World Bank Group, n.d. *World Development Indicators*. [online] Available at: https://databank.worldbank.org/source/world-development-indicators [Accessed 15 August 2024]. Source adapted.

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