Diploma Programme
Programme du diplôme
Programa del Diploma

Economics
Higher level and standard level
Paper 2

13 May 2025

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]**.

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Answer **one** question.

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

Text A — Overview of the economy and government policies in Kenya

1 Kenya, in East Africa, is achieving high annual economic growth rates, averaging above 5 %. Living standards are improving and employment is increasing in the manufacturing, tourism, construction, and education sectors. Kenya's high growth is also changing the distribution of income and affecting the environment. However, climate change, high levels of inequality and youth unemployment may reduce future growth rates.

2 Floods and droughts are severe and frequent. In 2022–2023, droughts caused agricultural output to fall, affecting the employment of 40 % of the population and doubling the number of people with insufficient food. The government took measures to increase food supplies, such as reducing the **tariff** on imports of rice. It did not impose a price ceiling for essential food, as food shortages might result.

3 The rising price of food is the main cause of inflation in Kenya. The central bank used a contractionary monetary policy in 2022 and 2023 to reduce inflation and to prevent the depreciation of the country's currency (Kenyan shilling, KES).

4 The budget deficit as a percentage of gross domestic product (GDP) became smaller in 2023 because government expenditure grew more slowly than GDP. Moreover, economic growth resulted in higher tax revenue from both income tax and a 16 % indirect tax on goods and services. The government is also receiving revenue from the sale of some state-owned enterprises (SOEs). A World Bank programme, aimed at an expansion of "green" energy in Kenya, provides financial and technological support to the Kenya Power and Lighting Company, an SOE that has been making losses.

5 The currency depreciation in 2022 boosted exports. Services, which are approximately 38 % of total exports and include tourism and financial services, are growing faster than exports of goods. Manufactured goods account for 37 % of total exports and agricultural goods account for 25 %. Revenue from exports of tea, flowers, vegetables, meat, and coffee are volatile and unpredictable. The droughts in 2022–2023 reduced output, which lowered export revenue from vegetables and flowers by almost 20 %.

Text B — Unequal distribution of the benefits of economic growth in Kenya

1 Although economic growth has reduced absolute poverty, inequality remains a problem, particularly between the formal and informal sectors and between the urban and rural areas. Rural poverty is caused by low agricultural productivity and farmers' limited access to markets, finance, and technology.

2 However, the level of education has improved significantly, with a literacy rate of over 90 %. Secondary school attendance rates have increased from 13 % in 2003 to 49 % in 2022, despite the costs of attending school. In 2022, the government introduced a fund (the Hustler Fund), partly financed by foreign aid. The fund provides low-interest loans to women, young people, and small firms, for education or investment.

(This question continues on the following page)

(Question 1 continued)

Text C — Reducing and adapting to climate change in Kenya

1 Global warming is affecting the Kenyan economy. Consequently, agricultural output and tourism, which account for 70 % of employment and most exports, will probably decline. Therefore, GDP could fall by 2 % annually. However, Kenya has relatively low carbon emissions, particularly because renewable resources generate 90 % of electricity, a figure that is planned to rise to 100 % by 2030.

2 Measures taken by other economies to reduce carbon emissions provide opportunities for Kenya because the markets for "green" goods are expanding. Kenya is able to sell tradable permits (carbon credits) to high-emitting countries due to its reforestation programmes.

3 The International Monetary Fund (IMF) recommends that climate-related considerations should be part of macroeconomic and infrastructure policies. It also recommends that carbon taxes should be imposed to reduce the use of fossil fuels by manufacturing firms. Rapid urbanization is increasing the need for electric vehicles and improved public transport. Energy efficiency measures, fuel substitution, and switching to rail transport will not only lower transportation costs but also reduce the trade deficit. This is because fossil fuels used for transportation and manufacturing are imported.

4 Kenya is able to obtain finance and technology for investment in climate-related projects, such as renewable energy and forestry programmes, through foreign aid and partnerships with the private sector. Overall, these policies will reduce environmental disasters and increase economic growth and jobs in the formal sector.

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(Question 1 continued)

Table 1: Balance of payments accounts for Kenya in billions of USA dollars (USD)

	2023
Exports of goods	8.66
Imports of goods	20.90
Balance of trade in goods	
Balance of trade in services	
Income	–2.67
Current transfers	6.98
Current account balance	–6.32

Table 2: Economic data for Kenya

	2015	**2022**
Real GDP (USD billion)	70.12	94.80
Real GDP per capita (USD)	1497	1755
Inflation rate (%)	6.60	7.70
Net portfolio investment (USD billion)	0.16	–0.70

Table 3: Development data for Kenya

	2015	**2022**
Population (million)	46.85	54.03
Gini coefficient	0.408	0.387*
Employment in the informal sector (% of total employment)	83	83
Human Development Index (HDI)	0.561	0.601

* estimate

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(Question 1 continued)

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

(ii) List **two** components of the Human Development Index (HDI) indicated in bold in **Table 3**. [2]

(b) (i) Using information from **Table 1**, calculate Kenya's balance of trade in goods for 2023 in billions of USD. [1]

(ii) Using information from **Table 1** and your answer to part (b)(i), calculate Kenya's balance of trade in services for 2023 in billions of USD. [2]

(iii) Sketch a demand and supply diagram to indicate that a price ceiling on essential food may cause a shortage of food in Kenya (**Text A**, paragraph **2**). [2]

(c) Using an AD/AS diagram, explain why a contractionary monetary policy may reduce inflation in Kenya (**Text A**, paragraph **3**). [4]

(d) Using a poverty cycle diagram, explain how the Hustler Fund could reduce poverty in Kenya (**Text B**, paragraph **2**). [4]

(e) Using an externalities diagram, explain how a carbon tax could reduce the market failure due to the use of fossil fuels by manufacturing firms in Kenya (**Text C**, paragraph **3**). [4]

(f) Using an exchange rate diagram, explain the likely effect on the exchange rate for the Kenyan shilling (KES) of the change from 2015 to 2022 in Kenya's net portfolio investment (**Table 2**). [4]

(g) Using information from the text/data and your knowledge of economics, discuss the consequences of high economic growth in Kenya. [15]

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

Text D — Overview of Bhutan

1 Bhutan is a lower-middle income country in southern Asia. It is mountainous, water is plentiful, and 60 % of the territory is protected forest. Since 2008, Bhutan has measured its economic development by changes in its "Gross National Happiness" (GNH) index. The index considers factors such as income inequality, environmental conservation, sustainable development, and gender equality, in addition to the components of the Human Development Index (HDI).

2 The pursuit of GNH has involved using government programmes to spread the benefits of economic growth across all social groups. An example of this is the construction of large hydropower plants, not only for the export of electricity but also to ensure that remote communities can buy power at low prices. Hydropower is a renewable method of producing electricity using the natural flow of water. With these new plants, all rural and urban areas had access to electricity by 2019.

3 Government intervention in the market for electricity has been necessary due to the high cost of resources. Both the production and distribution of electricity are therefore controlled by state-owned enterprises. Bhutan's government has relied on India for grants and loans to finance hydropower projects.

4 Sales of surplus electricity to India, amounting to over 70 % of electricity generation in 2021, have increased the funds available to the government for investment in healthcare and education. These revenues have also helped to finance the expansion of essential infrastructure, particularly road networks. The government's aim has been to reduce poverty and to improve well-being, especially in rural areas.

5 Hydropower has proved to be an important source of economic development. However, the private sector faces a lack of investment for multiple reasons, including high transport costs and a small domestic market. This has limited the creation of new private-sector jobs. Furthermore, a sustainability tax of 100 USA dollars (USD) per night for tourists helps with Bhutan's conservation efforts. The tax reduces Bhutan's competitiveness as a tourist destination.

6 Agriculture is vital to Bhutan's largely rural population. This sector employed 55 % of the workforce in 2021. However, most agricultural produce, such as rice, is consumed by farming households rather than sold in the market. By 2021, the country was importing about 50 % of its food. The growing food demands of urban areas could have negative consequences for the **balance of payments**.

7 Agricultural output is constrained by many factors, including a lack of machinery, irrigation and affordable credit. Bhutan's partnership with the United Nations International Fund for Agricultural Development has provided funds for investment in the agricultural sector, such as irrigation systems, roads connecting farms to markets, and storage facilities. However, the GNH emphasis on sustainability could restrict growth in this sector. For example, to preserve biodiversity, there are restrictions on the use of chemical fertilizers.

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(Question 2 continued)

Text E — Youth unemployment in Bhutan*

1 The youth unemployment rate for Bhutan in 2021 was 20.9 %. However, youth unemployment in towns was much higher than in rural areas. Approximately 60 % of the total unemployed youth were female.

2 There is a mismatch between the needs of employers and the skills of young people. Apart from this problem, the private sector requires government assistance in creating job opportunities so that young people can find employment outside of the public sector. Moreover, a lack of finance discourages the youth from **entrepreneurship**, further reducing their work prospects and the growth of Bhutan's economy.

Text F — Bhutan's trade relations with India

Bhutan has a free trade agreement with India, removing all tariffs between the two countries. In 2021–2022, about 80 % of Bhutan's international trade was with India. India's top imports from Bhutan include electricity, metals, and cement. Bhutan relies on India for goods such as fuel, cars, and rice. Transactions between the two countries are straightforward, as the central bank of Bhutan ensures the ngultrum (Bhutan's currency, BTN) is fixed to the rupee (India's currency, INR) at the exchange rate of 1 BTN = 1 INR.

* aged between 15 and 24

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(Question 2 continued)

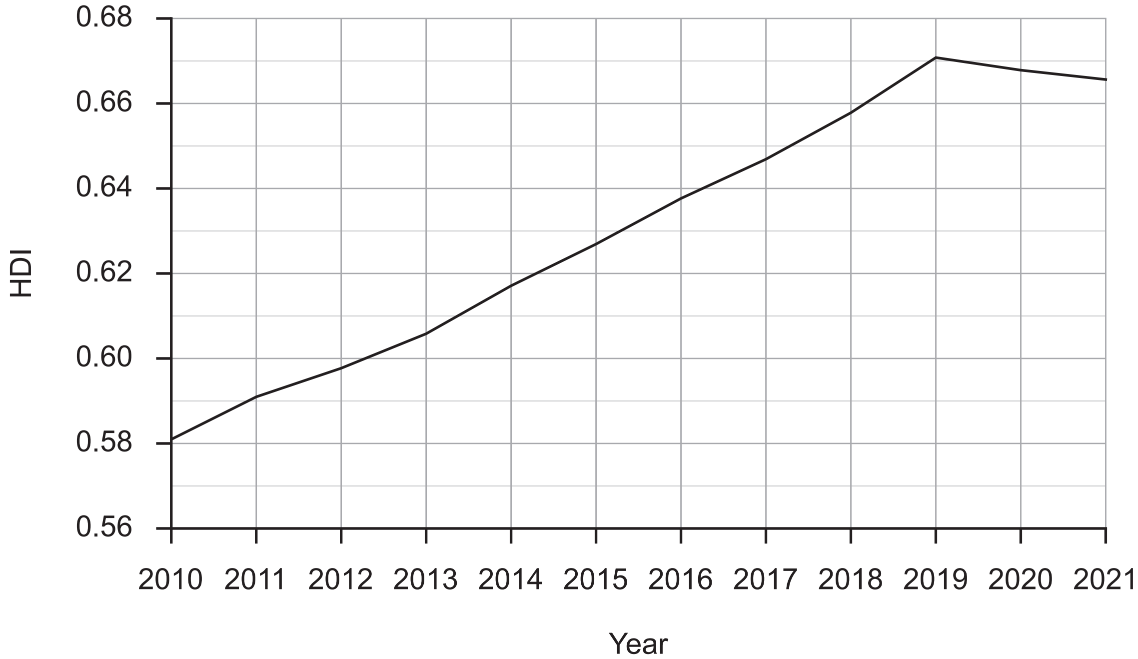
Table 4: Economic data for Bhutan

	2008	**2021**
Population (total)	689 737	782 455
Nominal gross domestic product (GDP) (USD million)	1227.81	2539.55
GDP deflator	143	279
GDP growth (annual %)	4.8	4.1
Current account balance (USD million)	–112.48	–321.53
Exchange rate (BTN per USD)	43.51	73.94

Table 5: Development data for Bhutan

	2007	**2022**
Life expectancy at birth (years)	67	72
Absolute poverty (% of population living on less than USD 2.15 (2017 PPP) per day)	5.9	0
Gini coefficient	0.381	0.285
People using safe sanitation services (% of population)	44	51

Figure 1: HDI for Bhutan from 2010 to 2021



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(Question 2 continued)

(a) (i) Define the term *balance of payments* indicated in bold in the text (**Text D**, paragraph 6). [2]

(ii) Define the term *entrepreneurship* indicated in bold in the text (**Text E**, paragraph 2). [2]

(b) (i) Using information from **Table 4**, calculate Bhutan's real GDP in USD in 2008. [2]

(ii) Using your answer to part (b)(i) **and Table 4**, calculate Bhutan's real GDP per capita in USD in 2008. [1]

(iii) A cement firm based in Bhutan contributed BTN 400 000 to the nominal GDP of Bhutan in 2008. Using information from **Table 4**, calculate the firm's contribution in USD to Bhutan's nominal GDP in 2008. [2]

(c) Using an AD/AS diagram, explain the likely effect on Bhutan's potential (long-term) output of further government investment in hydropower projects (**Text D**, paragraph 2). [4]

(d) Using a demand and supply diagram, explain how more affordable credit for investment in farming technology could affect the price of agricultural goods such as rice in Bhutan (**Text D**, paragraph 7). [4]

(e) Using an exchange rate diagram, explain how the central bank of Bhutan could maintain its fixed exchange rate during a period of increasing demand by Bhutan for cars and rice produced in India (**Text F**). [4]

(f) Using an externalities diagram, explain how increased government investment in healthcare could achieve allocative efficiency in Bhutan's healthcare market (**Text D**, paragraph 4). [4]

(g) Using information from the text/data and your knowledge of economics, evaluate the strengths and limitations of Bhutan's economic development strategy. [15]

Disclaimer:

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