Diploma Programme
Programme du diplôme
Programa del Diploma

# Economics
# Higher level and standard level
# Paper 2

12 May 2026

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

1 hour 45 minutes

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**Instructions to students**

- 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 Pakistan's economy and the impact of climate change**

1 Economic growth in Pakistan has been uneven and rather slow in the 21st century, relative to other economies in Asia. Absolute poverty has been significantly reduced because more jobs are becoming available in non-agricultural sectors. However, about 20 % of the population is estimated to lack sufficient food.

2 Inflation continues to be high, particularly in food and energy prices. Partly due to inflation, the rupee (PKR, Pakistan's currency) has depreciated against the US dollar. However, the **current account deficit** persists. Trade protection policies are used to try to decrease imports. Import tariffs on some food products are as high as 150 %. However, average import tariffs have been gradually reduced from 15 % to 12 %.

3 The ratio of tax revenue to gross domestic product (GDP) is very low. Consequently, there is a persistent budget deficit and it is difficult for the government to finance new projects. However, with financing from the World Bank, a large hydropower dam is being constructed. Designed to generate electricity, this project will provide clean and affordable energy. Furthermore, its construction is leading to improved additional infrastructure such as roads, which give local communities easier access to health services and education.

4 Investment by Pakistan's government in infrastructure and human capital is relatively low. However, the government provides large subsidies for agriculture, energy production and exports. The subsidies provided to some firms may have different effects on stakeholders. For example, there is financial support for large-scale farmers, but not for all small-scale farmers.

5 Climate change is damaging agricultural production, even though Pakistan was responsible for only 0.88% of global emissions in 2020. The disastrous impact of climate change is demonstrated when there is severe heat and droughts or floods. Millions of people are at risk of losing their homes, land or jobs because cattle, cotton, sugarcane and rice crops are destroyed. Pakistan has made a commitment to lower its greenhouse gas (GHG) emissions by 15 % by 2030.

**Text B — Migration to towns and cities**

Nearly 40 % of Pakistanis live in towns and cities. This percentage is rising as people are forced to migrate from agricultural areas in search of work. Water and land resources needed for agriculture, including forests, are being damaged by climate change, excessive grazing, and overuse of chemical fertilizers and pesticides. With an increasing population, some urban areas lack basic services, such as water, sanitation and waste removal, which harms public health. Moreover, transport, industry, waste management and energy use cause high GHG emissions and air pollution, reducing workers' efficiency.

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**(Question 1 continued)**

**Text C — Sustainable Development Goal of ending hunger, achieving food security and improving nutrition, while promoting sustainable agriculture (SDG #2)**

1 Agriculture in Pakistan accounts for 23 % of GDP and most of its export revenue. However, agricultural employment is insecure and hunger persists (Table 2). Many farmers are not landowners, but rent the land they work on. Alternative employment and educational opportunities are limited in rural areas.

2 The production of sugarcane and processed sugar is protected through import tariffs. In addition, regulations prevent new sugar processing firms from setting up in Pakistan. Therefore, farmers are forced to sell to the few regional mills, which have the power to control prices. The government subsidizes sugar production. In 2023, the government also raised the **minimum price** paid to sugar farmers from PKR 7.5 per kg to PKR 10 per kg, while guaranteeing that it would purchase any excess supply. However, growing sugarcane has environmental costs since it requires large quantities of water and fertilisers.

3 Sugar consumption in Pakistan has risen while demand for more nutritious and less environmentally damaging food products has remained low. Therefore, sugar has contributed to ill-health through diseases such as diabetes. Globally, the Engel curve for sugar shows that sugar consumption initially increases with rising incomes but eventually declines as incomes continue to grow. As a result, the global demand for sugar is likely to decline in the future.

4 The World Bank recommends diversification into healthier, more climate-resilient, and higher value crops. Changing agricultural practices could also reduce environmental damage.

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**(Question 1 continued)**

**Table 1: Economic data for Pakistan**

| | **2012** | **2022** |
|---|---|---|
| Real GDP per capita (USD) | 1310 | 1697 |
| Inflation rate (annual %) | 9.7 | 19.9 |
| Balance of trade in goods and services (USD billion) | –17.53 | –37.63 |
| Current account balance (% of GDP) | –3.3 | –0.9 |
| Government expenditure (% of GDP) | 17.1 | 16.5 |
| Government taxation revenue (% of GDP) | 10.3 | 11.4 |
| Exchange rate (PKR per USD) | 93.40 | 204.87 |

**Table 2: Development data for Pakistan**

| | **2012** | **2022** |
|---|---|---|
| Population (million) | 202.21 | 235.82 |
| Human Development Index (HDI) | 0.504 | 0.540 |
| HDI ranking | 158 | 164 |
| Gini coefficient | 0.295 | 0.307* |
| Forest area (thousands of square kilometres) | 40.29 | 36.85 |
| Households with insufficient food (% of population) | 15 | 19 |
| Production of wheat per hectare (thousands of kilograms) | 2.86 | 3.41 |
| Life expectancy at birth (years) | 64.8 | 66.4 |

* estimate

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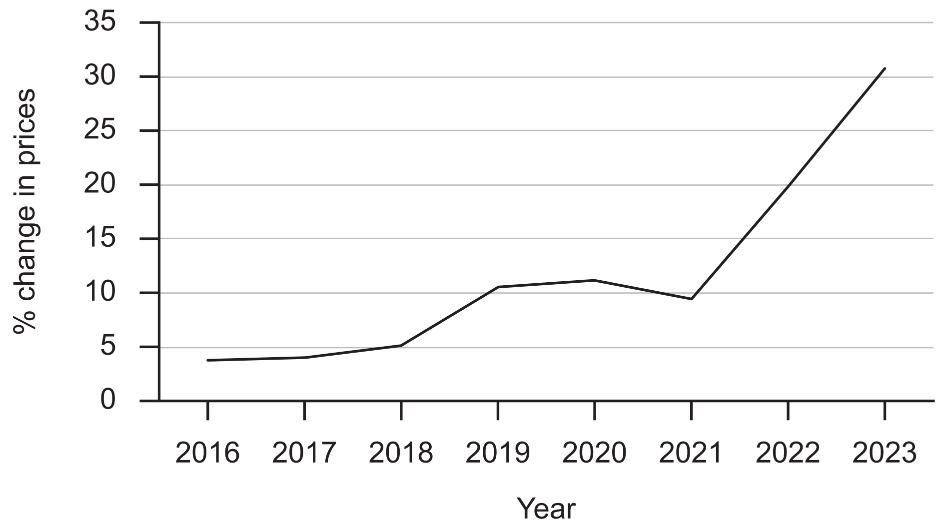
**(Question 1 continued)**

**Figure 1: Inflation in Pakistan: annual percentage change in consumer prices between 2016 and 2023**




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

(ii) Define the term *minimum price* indicated in bold in the text (**Text C**, paragraph **2**). [2]

(b) (i) After the rise in the minimum price in Pakistan in 2023, the quantity of sugar produced increased by 3 %. Calculate the price elasticity of supply (PES) for sugar in Pakistan (**Text C**, paragraph **2**). [2]

(ii) Using **Table 1**, calculate the value of PKR 9000 in US dollars in 2022. [2]

(iii) Using **Figure 1**, identify a year in which there was disinflation in Pakistan. [1]

(c) Using an exchange rate diagram, explain why inflation might cause the value of the PKR (Pakistan's currency) to depreciate (**Text A**, paragraph **2**). [4]

(d) Using an externalities diagram, explain why the quantity of electricity generated from the hydropower project is below the socially optimum output due to the additional infrastructure created (**Text A**, paragraph **3**). [4]

(e) Using a demand and supply diagram, explain how a subsidy for energy production increases government spending in Pakistan (**Text A**, paragraph **4**). [4]

(f) Using an AD/AS diagram, explain the likely effect of air pollution on Pakistan's potential (full employment) output (**Text B**). [4]

(g) Using information from the text/data and your knowledge of economics, discuss whether Pakistan is making effective progress towards achieving zero hunger while promoting sustainable agriculture (Sustainable Development Goal #2). [15]

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

**Text D — Overview of Brazil**

1 Brazil is an upper-middle income country located in South America. It is the largest producer of coffee in the world and has become a major exporter of products such as soybeans, petroleum, and automobiles. About 90 % of imports are manufactured goods, including machinery, chemicals, and parts for motor vehicles. Brazil's top trading partner is China, followed by the USA and Argentina.

2 The Central Bank of Brazil introduced a floating exchange rate system in 1999. However, it intervened in 2022 and sold the Brazilian real (BRL, Brazil's currency) to reduce a large current account deficit on the balance of payments.

3 Brazil has experienced long periods of currency depreciation. Consequently, the export sector has grown, leading to an expansion of Brazilian agricultural output. Brazil's total exports of goods rose by 6.7% between 2015 and 2019 after a sharp drop in the exchange rate of the BRL.

4 Soybean farmers in Brazil have gained significantly from the depreciation of the BRL. The prospect of increased revenues from exports has led to the expansion of soybean plantations and has made Brazil the world's largest exporter of soybeans. Increasing demand for soybeans from China has added to the beneficial effects of depreciation for the **primary sector**. Brazil's dependency on export revenues has increased, and vast areas of forest have been destroyed to make way for soybean farms.

5 Industries that rely on foreign inputs can become unprofitable during a period of currency depreciation. For example, the profits of Brazilian sugarcane farmers are likely to fall because they rely on imported fertilizers. Depreciation might therefore negatively affect economic growth and could also lead to **inflation**.

6 Brazil has been able to shield itself from some of the effects of higher input prices caused by depreciation. One example is the growth of the automobile parts sector, largely funded by foreign direct investment (FDI). Foreign vehicle manufacturers that operate in Brazil are therefore able to purchase auto-parts from the Brazilian domestic market. However, automation has contributed to structural unemployment in the Brazilian automobile industry.

7 Despite the benefits of a depreciating BRL, overall employment in agriculture and industry has been falling. The Brazilian government has tried to increase employment in agriculture by setting minimum prices on products such as coffee and wheat. Excess supply at the minimum price is purchased by the government. In the service industries, employment is increasing. Services accounted for 70 % of the workforce and over 50 % of gross domestic product (GDP) in 2021.

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(Question 2 continued)

**Text E — Income inequality in Brazil**

1 Income inequality has been decreasing in Brazil because there has been a reduction in poverty. However, there are still large differences in income between high-income households and the rest of the population.

2 Brazil has a diverse population, including Afro-Brazilians and Indigenous peoples, who have less access to high quality education and healthcare than the rest of the population. This limits their earning potential and leads to income inequality. Women face job discrimination, which adds to the income inequality.

3 Racial discrimination and gender discrimination reduce job opportunities and make it difficult for families to break out of the poverty cycle. Further, although Brazil's real GDP has increased since 2012, the benefits have not been spread equally.

4 The real income of households among the bottom 40 % of income earners fell between 2016–19. However, average real income increased during the same period. In 2022, the richest 20 % received over 50 % of the nation's income. This income inequality has led to differences in living standards within Brazil.

5 By making cash payments to families, the government has attempted to improve the living standards of millions of low-income Brazilians. Payments are often conditional on parents enrolling their children in school, thereby promoting the development of human capital. This programme supported 21.7 million families in 2023.

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**(Question 2 continued)**

**Table 3: Economic data for Brazil**

| | 2012 | 2022 |
|---|---|---|
| Inflation rate (annual %) | 5.4 | 9.3 |
| Real GDP per capita (BRL) | 20 592 | 20 128 |
| GDP growth (BRL, annual %) | 1.9 | 3.0 |
| Unemployment (% of labour force) | 7.3 | 9.2 |
| Exchange rate (BRL per USD) | 1.76 | 5.16 |
| Exports of goods and services (% of GDP) | 11.9 | 19.6 |

**Table 4: Development data for Brazil**

| | 2012 | 2022 |
|---|---|---|
| Life expectancy at birth (years) | 73.55 | 73.43 |
| People using safe sanitation services (% of population) | 41 | 50 |
| Absolute poverty (% of population with income below USD 2.15 (2017 PPP) per day) | 4.5 | 3.5 |
| Gini coefficient | 0.537 | 0.520 |
| Human Development Index (HDI) | 0.730 | 0.760 |

**Table 5: Real GDP and population data for Brazil**

| Year | 2014 | 2020 |
|---|---|---|
| Real GDP per capita (USD) | 12 071 | 6 923 |
| Population (millions) | 203.46 | 213.20 |

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**(Question 2 continued)**

(a) (i) Define the term *primary sector* indicated in bold in the text (**Text D**, paragraph 4). [2]

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

(b) (i) Using information from **Table 5**, calculate the change in Brazil's real GDP (USD) in millions between 2014 and 2020. [2]

(ii) Using information from **Table 3**, identify whether the BRL (Brazil's currency) has appreciated **OR** depreciated **OR** was constant against the US dollar between 2012 and 2022. [1]

(iii) Using information from the text (**Text D**, paragraph 6), sketch a labour market diagram to show the effect of automation on employment in the automobile industry. [2]

(c) Using an exchange rate diagram, explain why the production of Brazilian soybeans might have increased as the result of the Central Bank of Brazil's intervention in the foreign exchange market (**Text D**, paragraph 2). [4]

(d) Using a demand and supply diagram, explain the likely effects of currency depreciation on the Brazilian market for sugar cane (**Text D**, paragraph 5). [4]

(e) Using a poverty cycle diagram, explain the likely effect of Brazil's cash payments to families on living standards in Brazil (**Text E**, paragraph 5). [4]

(f) Using an AD/AS diagram, explain how increased exports might affect the rate of inflation in Brazil (**Text D**, paragraph 4). [4]

(g) Using information from the text/data and your own knowledge of economics, discuss the likely consequences of the depreciation of the BRL (Brazil's currency) on living standards in Brazil. [15]

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