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. Consumption and government spending are important sources of economic growth in Pakistan. Absolute poverty has been significantly reduced because more jobs are becoming available in non-agricultural sectors.

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. 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.

6 According to the World Bank, Pakistan's economic growth could be reduced by 20 % annually if climate change worsens. The reduced growth would result from lower agricultural output, damage to infrastructure, worsening public health, and reduced efficiency. 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. 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 ensuring access to affordable, reliable, sustainable and modern energy for all (SDG #7)

1 Pakistan's energy sector is important for development and for poverty reduction, but the use of fossil fuels contributes to GHG emissions. Imports of fossil fuels account for 40% of the country's energy production. Furthermore, significant government spending is needed for energy projects and subsidies. Despite this intervention, some households do not have electricity or clean cooking fuel (Table 2).

2 Reforms to the energy sector, including the use of a carbon tax, would reduce the government's budget deficit. The government is planning to expand energy production, using more solar, wind and hydropower. Fossil fuels will still be needed, but no new power plants using fossil fuels will be built. In the long term, promoting the use of renewable energy will reduce imports and prices.

3 The price of electricity in Pakistan has risen every few months. These increases reflect the higher prices of imported fossil fuels and are incentivising households to install solar panels. In 2024, there was another increase in the electricity price from PKR 29.78 per unit to PKR 35.50 per unit.

4 Depending on how the investment in renewable energy is financed, energy prices may initially rise. Absolute poverty may increase if households need to pay much more for energy. However, revenue from a new carbon tax could be used to provide **transfer payments** to low-income households.

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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*
Renewable energy share (% of total final energy consumption)	47.2	41.6
Access to electricity (% of population)	89	95
Access to clean fuels and technologies for cooking (% of population)	38	53
GHG emissions (metric tonnes per capita)	1.69	2.11

* estimate

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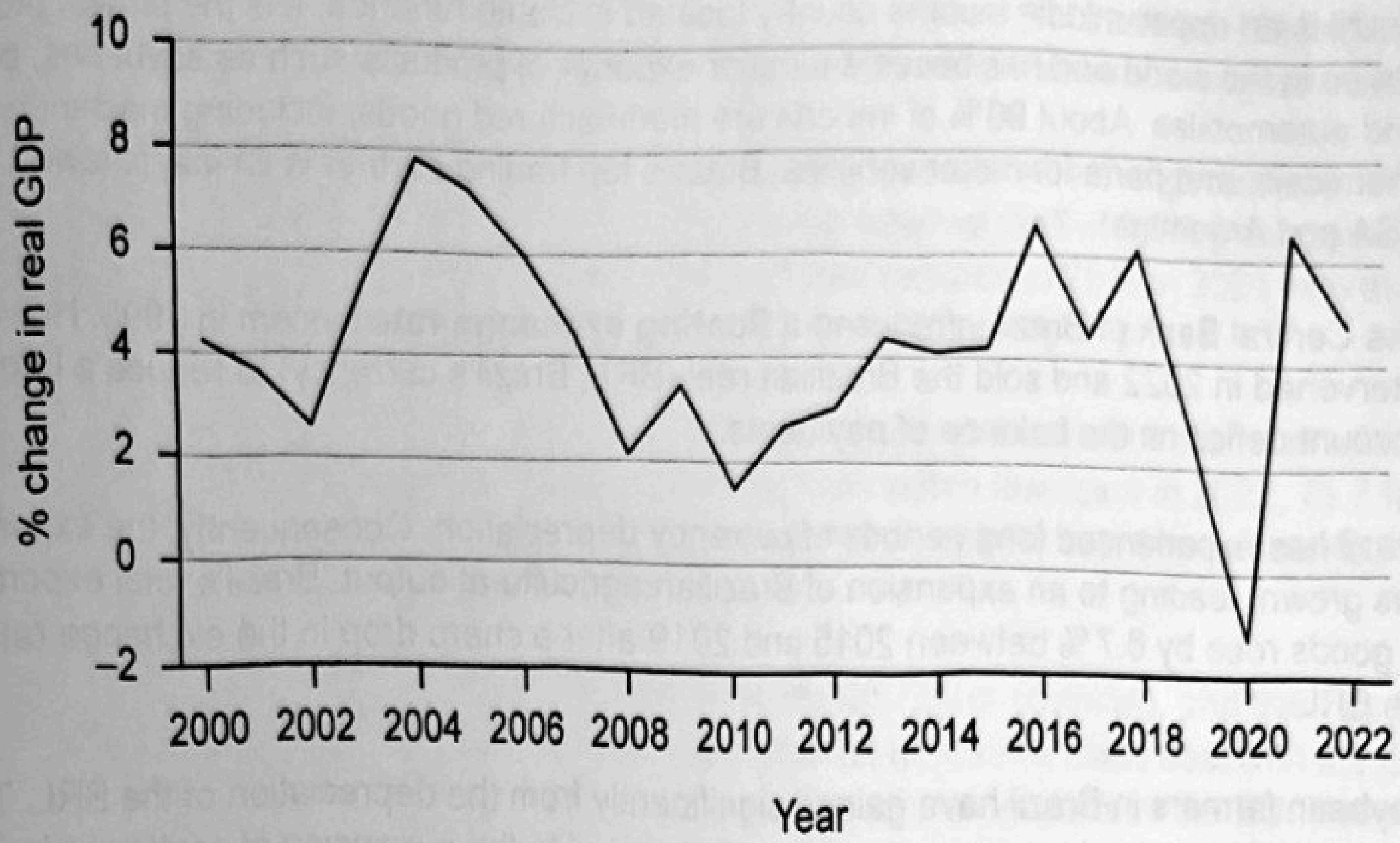
(Question 1 continued)

Figure 1: Economic growth in Pakistan: annual percentage change in real GDP between 2000 and 2022



(a) (i) Define the term *transfer payments* indicated in bold in the text (**Text C**, paragraph **4**). [2]

(ii) Define the term *balance of trade* indicated in bold in **Table 1**. [2]

(b) (i) After the price increase for electricity in Pakistan in 2024, the quantity of electricity demanded fell by 10 %. Calculate the price elasticity of demand (PED) for electricity in Pakistan (**Text C**, paragraph **3**). [2]

(ii) Using **Table 1** and **Table 2**, calculate total real GDP in Pakistan in millions of US dollars in 2022. [2]

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

(c) Using a circular flow of income diagram, explain how government spending in Pakistan can increase economic growth (**Text A**, paragraph **1**). [4]

(d) Using an international trade diagram, explain how consumer surplus is likely to change as the result of the reduction in tariffs on imports into Pakistan (**Text A**, paragraph **2**). [4]

(e) Using an exchange rate diagram, explain how increased imports of fossil fuels are likely to affect the exchange rate of the PKR (Pakistan's currency) (**Text C**, paragraph **1**). [4]

(f) Using a Lorenz curve diagram, explain how the distribution of income in Pakistan changed between 2012 and 2022 (**Table 2**). [4]

(g) Using information from the text/data and your knowledge of economics, discuss whether Pakistan is making effective progress towards providing affordable and reliable energy for all, in a way that is sustainable (Sustainable Development Goal #7). [15]

(Question 2 continued)

Text E — Brazil and the Southern Common Market

1 Since 1991, Brazil has been a member of Mercosur (the Southern Common Market), which comprises five countries in South America. Mercosur is one of the world's largest trading blocs.

2 The economic purpose of Mercosur is to promote the free movement of goods and services, and factors of production, within the bloc. A common external tariff of 35% was imposed on imports from countries outside the bloc. The tariff was reduced to 25% in 2021 with the intention of raising economic growth for member countries by reducing import prices.

3 A major benefit of Mercosur for Brazil is increased access to South American markets. Brazil exported USD 341 billion worth of goods and services within Mercosur in 2022, 75.7% of the bloc's total exports. The same year, its imports from member countries amounted to USD 270 billion, 71.7% of the bloc's total imports.

4 Mercosur has struggled to reach trade agreements with other countries, and this has limited Brazil's economic growth. One example is the attempt to reach a trade deal with the European Union (EU) that would remove tariffs on roughly 90% of their exports to the EU. However, several EU members are opposed to any such agreement, partly due to concerns that cheap Brazilian beef exports will reduce the incomes of European farmers.

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Table 3: Economic data for Brazil

	2012	2022
Inflation rate (annual %)	5.4	9.3
Real GDP per capita (BRL)	20592	20128
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
Forest area (% of land area)	60.8	59.3
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: Unemployment data for Brazil

Year	2018	2020
Unemployment (% of labour force)	12.3	13.7
Labour force (millions)	106	102

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(Question 2 continued)

(a) (i) Define the term *floating exchange rate* indicated in bold in the text (**Text D**, paragraph **2**). [2]

(ii) Define the term *foreign direct investment (FDI)* indicated in bold in the text (**Text D**, paragraph **6**). [2]

(b) (i) Using information from **Table 5**, calculate the change in Brazil's unemployment in millions between 2018 and 2020. [2

(ii) Using information from **Table 3**, identify whether the purchasing power of consumers in Brazil increased **OR** decreased **OR** was constant in 2012. [1

(iii) Using information from **Table 3**, sketch an AD/AS diagram to show how real GDP changed in Brazil during 2022. [

(c) Using an exchange rate diagram, explain how the prices of imports into Brazil were affected by the Central Bank of Brazil's intervention in the foreign exchange market (**Text D**, paragraph **2**).

(d) Using a demand and supply diagram, explain how minimum prices might lead to lower unemployment in Brazil's agricultural sector (**Text D**, paragraph **7**).

(e) Using an international trade diagram, explain the likely effect of the reduction in Mercosur's external tariff on imports into Brazil (**Text E**, paragraph **2**).

(f) Using a production possibilities curve (PPC) diagram, explain how a successful trade deal with the European Union (EU) might increase the employment of resources in Brazil (**Text E**, paragraph **4**).

(g) Using information from the text/data and your knowledge of economics, discuss the likely consequences of the depreciation of the BRL (Brazil's currency) on Brazil's economic growth and level of unemployment.