

Markscheme

May 2025

Economics

Higher level and standard level

Paper 2

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Notes for examiners:

- 1. Use the question-specific markscheme together with the markbands. Award up to the maximum marks as indicated.**
- 2. Whenever relevant, carry over marks must be awarded. If a candidate makes an error in calculation, but then uses the incorrect figure appropriately and accurately in later question parts, then the candidate may be fully rewarded. This is the “own-figure rule” and you should put OFR on the script where you are rewarding this.**
- 3. A candidate may be penalized for not rounding correctly, failing to give answers correct to 2 dp or, in some cases, for not including the appropriate units. However, a candidate may only be penalized ONCE per script for each type of error.**

1. (a) (i) Define the term *price ceiling* indicated in bold in the text (**Text A**, paragraph 2).

[2]

Level		Marks
0	<i>The work does not meet a standard described by the descriptors below.</i>	0
1	<i>Vague definition</i>	1
	The idea that it is one of the following: <ul style="list-style-type: none">• a maximum price (set by the government or an authority)• above which producers/sellers may not charge• set below the market equilibrium price	
2	<i>Accurate definition</i>	2
	An understanding that it is any two of the following: <ul style="list-style-type: none">• a maximum price (set by the government or an authority)• above which producers/sellers may not charge• set below the market equilibrium price	

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

Level		Marks
0	<i>The work does not meet a standard described by the descriptors below.</i>	0
1	<i>Vague definition</i>	1
	The idea that it is one of the following: <ul style="list-style-type: none"> • an indirect tax/tax per unit • on emissions (from fossil fuels) • to reduce negative externalities, address market failure, or incentivize lower pollution 	
2	<i>Accurate definition</i>	2
	An understanding that it is any two of the following: <ul style="list-style-type: none"> • an indirect tax/tax per unit • on emissions (from fossil fuels) • to reduce negative externalities, address market failure, or incentivize lower pollution 	

(b) (i) Using information from **Table 1**, calculate the current account on Kenya's balance of payments for 2023 in billions of USD. [1]

$$8.66 - 20.9 + 1.61 - 2.67 + 6.98$$

$$= -6.32 \quad [1]$$

An answer of -6.32 without working or units is sufficient for [1].

(ii) Assume that the price of a kilogram of tea, exported from Kenya in 2022, was 340 Kenyan shillings (KES). Using information from **Table 2**, calculate the price of a kilogram of tea in USD in 2022. [2]

$$118 \text{ KES} = 1 \text{ dollar}$$

$$\Rightarrow \frac{1}{118} \times 340 \quad [1]$$

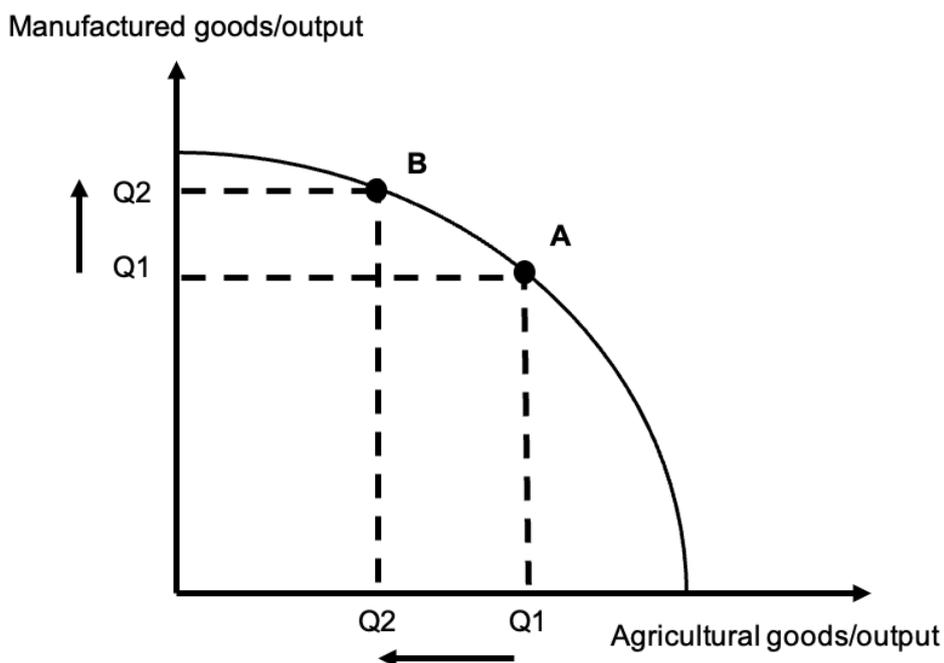
Any valid working should be rewarded with [1].

$$= 2.88 \quad [1]$$

An answer of 2.88 without working is sufficient for [1].

For full marks to be awarded, the response must provide valid working.

- (iii) Sketch a production possibilities curve (PPC) diagram to show how increased output of manufactured goods may lead to decreased agricultural output in Kenya, if all resources are already fully employed (**Text B**, paragraph 1). [2]



Level		Marks
0	<i>The work does not meet a standard described by the descriptors below.</i>	0
1	For sketching a PPC diagram indicating that as manufactured goods increase, there is a decrease in agricultural goods BUT there are some incorrect/missing labels/projections.	1
2	For sketching a correctly labelled PPC diagram indicating that as manufactured goods increase, there is a decrease in agricultural goods.	2

For a PPC diagram, the axes could be two alternative products, one on each axis, e.g. cars and rice. The curve could be drawn as a straight line. A title is not necessary.

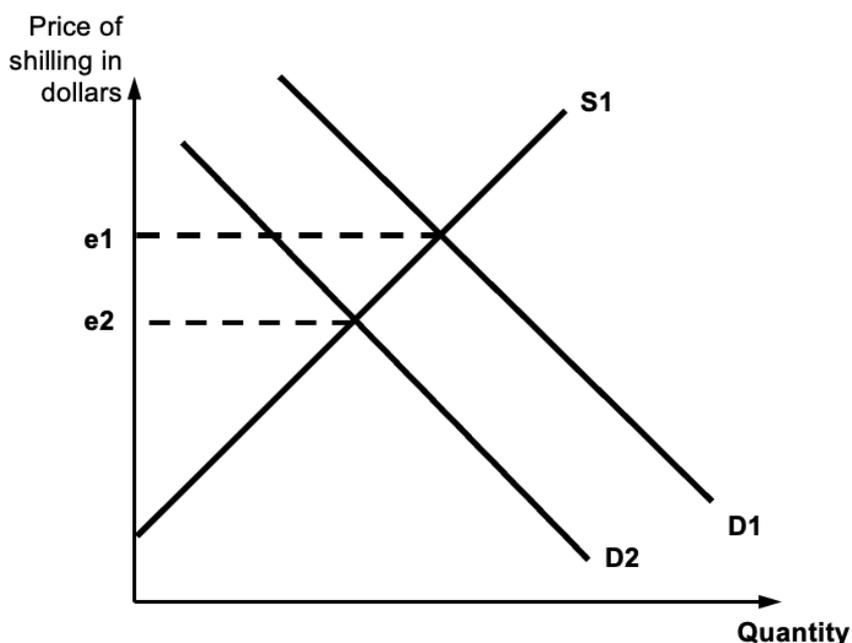
Alternatively, the diagram may show a shift and a pivot of the curve with the result being less agricultural output and more manufactured output.

- (c) Using an exchange rate diagram, explain the likely effect on the exchange rate for the Kenyan shilling (KES) of the reduced export revenue from vegetables and flowers (**Text A**, paragraph 5).

[4]

Level		Marks
0	<i>The work does not meet a standard described by the descriptors below.</i>	0
1	<i>There is a correct diagram OR an accurate written response.</i>	1–2
	For a correctly labelled exchange rate diagram, showing demand shifting left and the exchange rate decreasing OR for an explanation that because buyers of exports need to buy the KES, the reduced demand for exports causes reduced (foreign) demand for/purchase of KES leading to a fall in the exchange rate (depreciation).	
2	<i>There is a correct diagram AND an accurate written response.</i>	3–4
	For a correctly labelled exchange rate diagram, showing demand shifting left and the exchange rate decreasing AND for an explanation that because buyers of exports need to buy the KES, the reduced demand for exports causes reduced (foreign) demand for/purchase of KES leading to a fall in the exchange rate (depreciation).	

Candidates who incorrectly label diagrams can be awarded a maximum of [3].



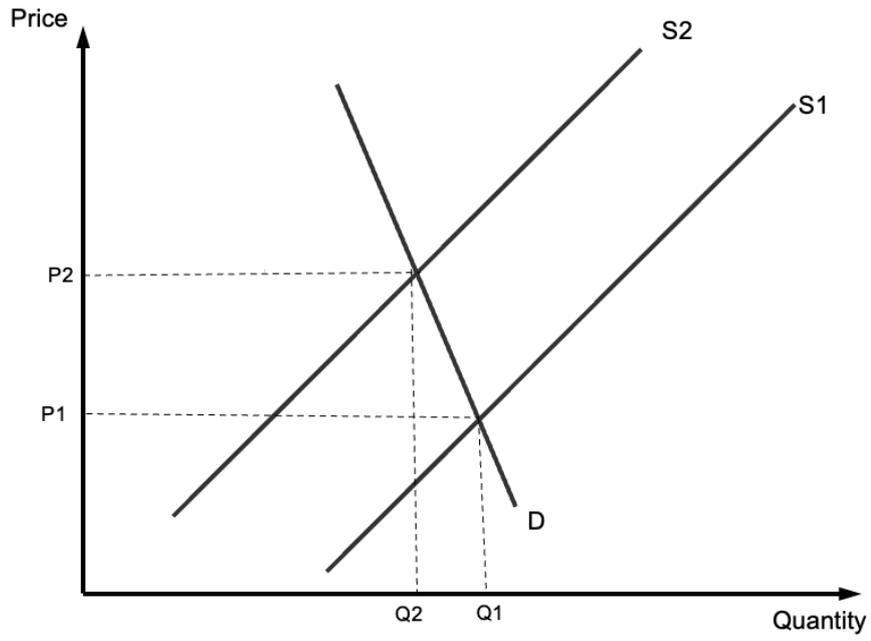
The vertical axis may be exchange rate, price/value of shilling in another currency, other currency/shilling or other currency per shilling. The horizontal axis may be quantity or quantity of shilling. All abbreviations are acceptable. A title is not necessary.

- (d) Using a demand and supply diagram, explain how price inelastic demand for tea causes the revenue from selling tea to increase when the supply decreases (**Text A**, paragraph 5).

[4]

Level		Marks
0	<i>The work does not meet a standard described by the descriptors below.</i>	0
1	<i>There is a correct diagram OR an accurate written response.</i>	1–2
	<p>For a correctly labelled demand and supply diagram, showing the price rising and an increase in revenue (the revenue box area(s) may be shaded, labelled on the diagram or delineated in the explanation) OR for an explanation that inelastic demand means that the proportionate (percentage/relative) change in quantity/consumption is less than the proportionate (percentage/relative) change in price.</p> <p>N.B. Responses that refer only to nominal changes (e.g. “a change in price causes a small change in quantity”) rather than proportionate/percentage changes should be awarded a maximum of [1] for the explanation.</p>	
2	<i>There is a correct diagram AND an accurate written response.</i>	3–4
	<p>For a correctly labelled demand and supply diagram, showing the price rising and an increase in revenue (the revenue box area(s) may be shaded, labelled on the diagram or delineated in the explanation) AND for an explanation that inelastic demand means that the proportionate (percentage/relative) change in quantity/consumption is less than the proportionate (percentage/relative) change in price.</p> <p>N.B. Responses that refer only to nominal changes (e.g. “a change in price causes a small change in quantity”) rather than proportionate/percentage changes should be awarded a maximum of [1] for the explanation.</p>	

Candidates who incorrectly label diagrams can be awarded a maximum of **[3]**.



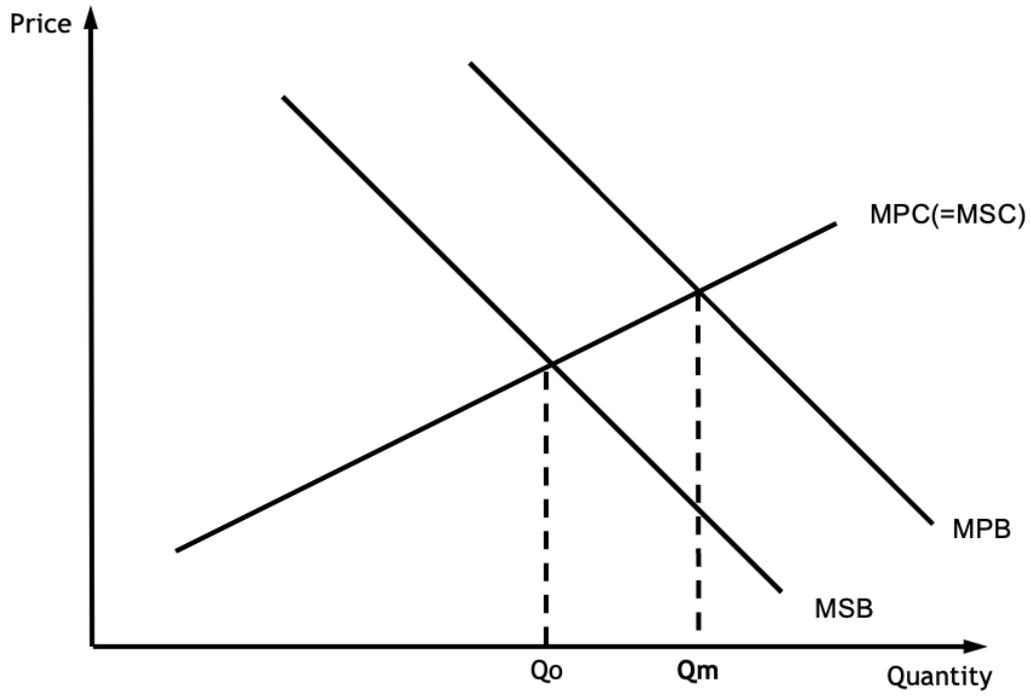
The axes can be labelled as P and Q. The revenue may be indicated with a shaded area or numbers/letters in the diagram. A title is not necessary.

- (e) Using an externalities diagram, explain why the use of fossil fuels for cooking by Kenyan households may cause market failure (**Text C**, paragraph 2).

[4]

Level		Marks
0	<i>The work does not meet a standard described by the descriptors below.</i>	0
1	<i>There is a correct diagram OR an accurate written response.</i>	1–2
	<p>For a correctly labelled externalities diagram, showing a negative consumption externality, with MPB greater than MSB, and the market quantity of fossil fuels greater than the socially optimum quantity OR for an explanation that since the use of fossil fuels has negative externalities/external costs, the amount used will cause <i>(one of the following)</i></p> <ul style="list-style-type: none"> • the market quantity and the socially optimum quantity to be different • a welfare loss • a misallocation of resources <p>N.B. <i>If a candidate incorrectly identifies the situation as a negative production externality, resulting in an incorrect diagram, this should not be penalised again in the explanation. The explanation may still be awarded up to [2] if it otherwise meets the markscheme requirements.</i></p>	
2	<i>There is a correct diagram AND an accurate written response.</i>	3–4
	<p>For a correctly labelled externalities diagram, showing a negative consumption externality, with MPB greater than MSB, and the market quantity of fossil fuels greater than the socially optimum quantity AND for an explanation that since the use of fossil fuels has negative externalities/external costs, the amount used will cause <i>(one of the following)</i></p> <ul style="list-style-type: none"> • the market quantity and the socially optimum quantity to be different • a welfare loss • a misallocation of resources <p>N.B. <i>If a candidate incorrectly identifies the situation as a negative production externality, resulting in an incorrect diagram, this should not be penalised again in the explanation. The explanation may still be awarded up to [2] if it otherwise meets the markscheme requirements.</i></p>	

*Candidates who incorrectly label diagrams can be awarded a maximum of **[3]**.*

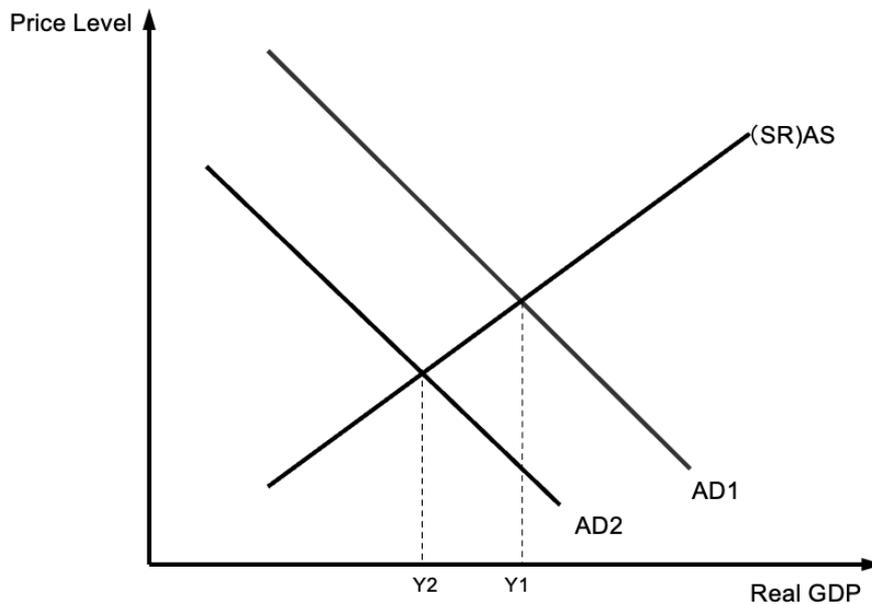


The vertical axis may be price, but could be costs or benefits. The horizontal axis is quantity. P and Q are sufficient. A title is not necessary.

- (f) Using an AD/AS diagram, explain how the change in Kenya’s balance of trade in goods and services between 2015 and 2022 may have affected its real GDP (**Table 2**). **[4]**

Level		Marks
0	<i>The work does not meet a standard described by the descriptors below.</i>	0
1	<i>There is a correct diagram OR an accurate written response.</i>	1–2
	For a correctly labelled AD/AS diagram, showing AD shifting to the left and a fall in real GDP OR for an explanation that the widening deficit on the balance of trade will cause AD (expenditure) to fall, which will lower real GDP. N.B. <i>Candidates do not need to state that the "deficit widens" to gain full marks, as long as the direction of impact (AD/expenditure falling) and the reasoning (due to a trade deficit/negative net exports) are clearly conveyed.</i>	
2	<i>There is a correct diagram AND an accurate written response.</i>	3–4
	For a correctly labelled AD/AS diagram, showing AD shifting to the left and a fall in real GDP AND for an explanation that the widening deficit on the balance of trade will cause AD (expenditure) to fall, which will lower real GDP. N.B. <i>Candidates do not need to state that the "deficit widens" to gain full marks, as long as the direction of impact (AD/expenditure falling) and the reasoning (due to a trade deficit/negative net exports) are clearly conveyed.</i>	

Candidates who incorrectly label diagrams can be awarded a maximum of **[3]**.



For an AD/AS diagram, the vertical axis may be Average (General) Price Level or Price Level or CPI. The horizontal axis may be real output, real national output, real income, real national income, real GDP or real Y. All abbreviations are acceptable. A Keynesian AS is acceptable, so long as the intersections with the AD curves do not occur on the vertical section. A title is not necessary.

- (g) Using information from the text/data and your knowledge of economics, discuss the impact of high economic growth on the distribution of income in Kenya.

[15]

Marks	Level descriptor
0	<ul style="list-style-type: none"> • The work does not meet a standard described by the descriptors below.
1–3	<ul style="list-style-type: none"> • The response indicates little understanding of the specific demands of the question. • Economic theory is stated but it is not relevant. • Economic terms are stated but they are not relevant or are used incorrectly. • The response contains no evidence of synthesis or evaluation. • The response contains no use of text/data or it is merely copied.
4–6	<ul style="list-style-type: none"> • The response indicates some understanding of the specific demands of the question. • Relevant economic theory is described. • Some relevant economic terms are included. • The response contains evidence of relevant but superficial synthesis or evaluation. • The response contains limited use of text/data.
7–9	<ul style="list-style-type: none"> • The response indicates understanding of the specific demands of the question, but these demands are only partially addressed. • Relevant economic theory is partly explained. • Some relevant economic terms are used appropriately. • Where appropriate, relevant diagram(s) are included. • The response contains evidence of appropriate synthesis or evaluation but lacks balance. • The response includes some relevant information from the text/data.
10–12	<ul style="list-style-type: none"> • The specific demands of the question are understood and addressed. • Relevant economic theory is explained. • Relevant economic terms are used appropriately. • Where appropriate, relevant diagram(s) are included and explained. • The response contains evidence of appropriate synthesis or evaluation that is mostly balanced. • The use of information from the text/data is generally appropriate, relevant, and applied correctly.
13–15	<ul style="list-style-type: none"> • The specific demands of the question are thoroughly understood and addressed. • Relevant economic theory is fully explained. • Relevant economic terms are used appropriately throughout the response. • Where appropriate, relevant diagram(s) are included and fully explained. • The response contains evidence of effective and balanced synthesis or evaluation. • The use of information from the text/data is appropriate, relevant, and is used to formulate a reasoned argument supported by analysis/evaluation.

Command term

“Discuss” requires candidates to offer a considered and balanced review that includes a range of arguments, factors or hypotheses. Opinions or conclusions should be presented clearly and supported by appropriate evidence.

Terminology may include:

- growth
- equity
- economic well-being
- development
- absolute/relative poverty
- nominal/real GDP

Economic models to support analysis may include:

- a labour market diagram
- an AD/AS diagram
- a Lorenz curve diagram
- a poverty cycle diagram

N.B. It should be noted that diagrams that have already been given in answers to parts (b), (c), (d), (e) or (f), and then referred to in part (g), should be rewarded.

Responses may include:

<i>Inequality is reduced</i>	<i>Inequality is increased</i>
<ul style="list-style-type: none"> • the Gini coefficient is lower (Table 3) and poverty had declined earlier in the century (Text B, paragraph 1) possibly due to improved access to education (Text B, paragraph 3) and/or employment opportunities outside the agricultural sector (Text A, paragraph 1). 	<ul style="list-style-type: none"> • absolute poverty has increased since 2015 (Table 3) perhaps due to food insecurity, supply-shocks in the agricultural sector (Text A, paragraph 2) or pandemic-related shocks which may have resulted in uneven benefits from economic growth in that period.
<ul style="list-style-type: none"> • HDI has increased (Table 3) reflecting improvements in health, education and income, indirectly suggesting broader sharing of the benefits of growth. 	<ul style="list-style-type: none"> • HDI coefficient has not improved significantly over time and IHDI is much lower than HDI (Table 3), indicating that inequality in access to health, education, and income is still widespread.
<ul style="list-style-type: none"> • employment in the informal sector is not increasing (Table 3). 	<ul style="list-style-type: none"> • inequality between rural and urban and between workers in informal and formal sectors (Text B, paragraph 1 and 2) means that rural populations and workers in the informal sectors are not benefiting equally from growth.

<ul style="list-style-type: none"> • employment in certain sectors (secondary and tertiary) increasing (Text A, paragraph 1), potentially reducing informal employment over time. 	<ul style="list-style-type: none"> • the majority of workers are in informal sector (Table 3), which implies that those employed in formal sector and in secondary and tertiary sectors are gaining more (stable) wages, benefits and protections.
<ul style="list-style-type: none"> • high level of remittances (part of transfers) contribute to growth and help to alleviate poverty (Table 1). 	<ul style="list-style-type: none"> • low productivity in agriculture → lower incomes (Text A, paragraph 2; Text B, paragraph 1) and export revenues from primary goods are volatile due to low PED and supply shocks (Text A, paragraph 5).
<ul style="list-style-type: none"> • real GDP per capita is increasing but that is only an average measure (Table 2). 	<ul style="list-style-type: none"> • Inflation, which may be in part due to high economic growth, harms low-income households especially without price ceilings (maximum price) for food (Text A, paragraph 2).
<ul style="list-style-type: none"> • food and fuel subsidies may help those on low incomes (Text A, paragraph 2). 	<ul style="list-style-type: none"> • depreciation of KES will help increase export revenue (and thus growth) but it will also raise import prices, especially food and fuel, which low-income households spend relatively more on (Text A, paragraph 5 and/or Table 2).
<ul style="list-style-type: none"> • privatization (Text A, paragraph 4) may contribute to economic growth as firms operate with greater efficiency, it may also lead to lower prices with more competition and will allow more government expenditure. 	<ul style="list-style-type: none"> • Privatization may alternatively lead to higher prices if it results in monopolies (Text A, paragraph 4). Driven by profit incentive, they may also lay-off workers, resulting in increased unemployment and income inequality. • higher interest rates may lead to more inequality (Text A, paragraph 3).
<ul style="list-style-type: none"> • tax revenues are rising with growth → government may be able to provide more transfer payments etc. (Text A, paragraph 4). Since government spending is not increasing as fast as GDP, the current redistributive policies may be more manageable (will contribute significantly less to the public/government debt). 	<ul style="list-style-type: none"> • high indirect taxes and extra taxes on alcohol and tobacco are regressive (Text A, paragraph 4).

<ul style="list-style-type: none"> Improved education access and gender parity (Text B, paragraph 3) will help increase human capital and reduce the inequality of opportunities. 	<ul style="list-style-type: none"> Economic growth is uneven with a fall in agricultural output and investment, suggesting that income may stagnate or fall in that sector (Text B, paragraph 1).
<ul style="list-style-type: none"> the Hustler fund will help those on low incomes (women, those facing youth unemployment) and small businesses gain access to funds (Text B, paragraph 4) which may contribute to economic growth and reduce inequalities. 	<ul style="list-style-type: none"> global warming will harm those with low incomes in agriculture relatively more (who won't be able to enjoy the benefits of economic growth) and so inequality may increase (Text C, paragraph 1).
<ul style="list-style-type: none"> if low-carbon growth can be maintained there will be more employment in the formal economy (Text C, paragraph 2). 	<ul style="list-style-type: none"> carbon taxes needed, but may be regressive (Text C, paragraph 2).

Examiners should be aware that candidates may take a different approach which, if appropriate, should be rewarded.

2. (a) (i) Define the term *infrastructure* indicated in bold in the text (**Text D**, paragraph 4).

[2]

Level		Marks
0	<i>The work does not meet a standard described by the descriptors below.</i>	0
1	<i>Vague definition</i>	1
	The idea that it is one of the following: <ul style="list-style-type: none"> • (large scale) public systems (services and facilities) of a country • necessary for economic activity/the functioning of an economy • adding to the capital stock of a nation • (usually) provided by the government • generating (significant) positive externalities. 	
2	<i>Accurate definition</i>	2
	The idea that it is any two of the following: <ul style="list-style-type: none"> • (large scale) public systems (services and facilities) of a country • necessary for economic activity/the functioning of an economy • adding to the capital stock of a nation • (usually) provided by the government • generating (significant) positive externalities. 	

- (ii) Define the term *private sector* indicated in bold in the text (**Text D**, paragraph 5).

[2]

Level		Marks
0	<i>The work does not meet a standard described by the descriptors below.</i>	0
1	<i>Vague definition</i>	1
	The idea that it is economic activities/production/factors of production not controlled by the state/government.	
2	<i>Accurate definition</i>	2
	Ownership/control is exercised by private individuals/organizations OR Firms are run by private individuals/organizations.	

- (b) (i) Using information from **Table 4**, calculate Bhutan’s GDP deflator in 2021. **[2]**

$$(2539.55 / 910.23) \times 100$$

Any valid working is sufficient for [1] (e.g. if x100 has been neglected).

$$= 279 \quad \mathbf{[1]}$$

For full marks to be awarded the response must provide valid working.

- (ii) Using information from **Table 4**, calculate Bhutan’s real GDP per capita in USD in 2008. **[1]**

$$858.61 \text{ million} / 689\,737$$

$$= 1244.84$$

An answer of 1244.84 or 1245 is sufficient for [1]

Workings are not required.

- (iii) A cement firm based in Bhutan contributed USD 800 000 to the nominal GDP of Bhutan in 2021. Using information from **Table 4**, calculate the firm’s contribution in BTN to Bhutan’s nominal GDP in 2021. **[2]**

$$800\,000 \times 73.94$$

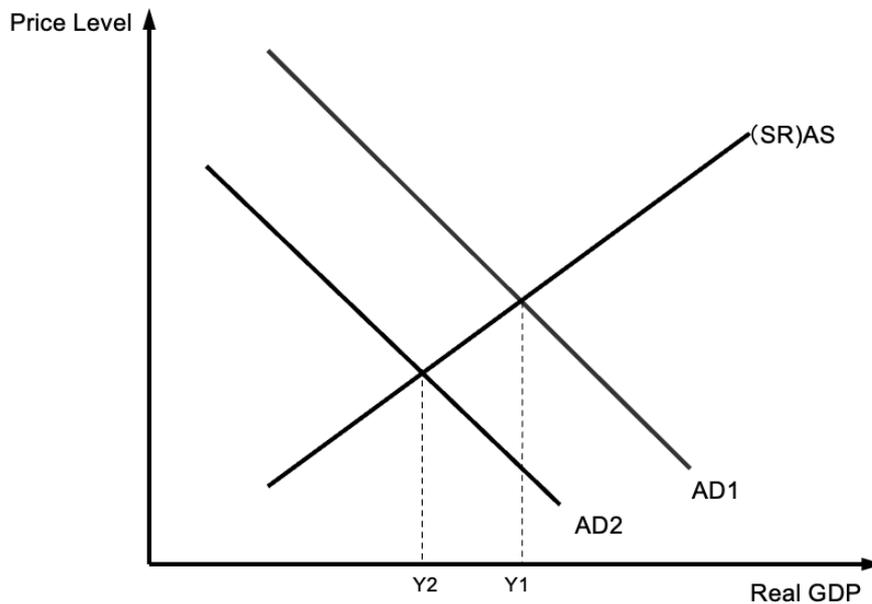
Any valid working is sufficient for [1]

$$= 59\,152\,000 \quad \mathbf{[1]}$$

- (c) Using an AD/AS diagram, explain the likely effect on Bhutan’s real GDP of a large fall in sales of metals and cement to India (**Text F**). **[4]**

Level		Marks
0	<i>The work does not meet a standard described by the descriptors below.</i>	0
1	<i>There is a correct diagram OR an accurate written response.</i>	1–2
	For a correctly labelled AD/AS diagram, and AD shifting to the left with a fall in real GDP OR for an explanation that a fall in export (revenues) of metals and cement will cause AD/expenditure to fall, which will lower real GDP.	
2	<i>There is a correct diagram AND an accurate written response.</i>	3–4
	For a correctly labelled AD/AS diagram, and AD shifting to the left with a fall in real GDP AND for an explanation that a fall in export (revenues) of metals and cement will cause AD (expenditure) to fall, which will lower real GDP.	

Candidates who label diagrams incorrectly can be awarded a maximum of **[3]**.

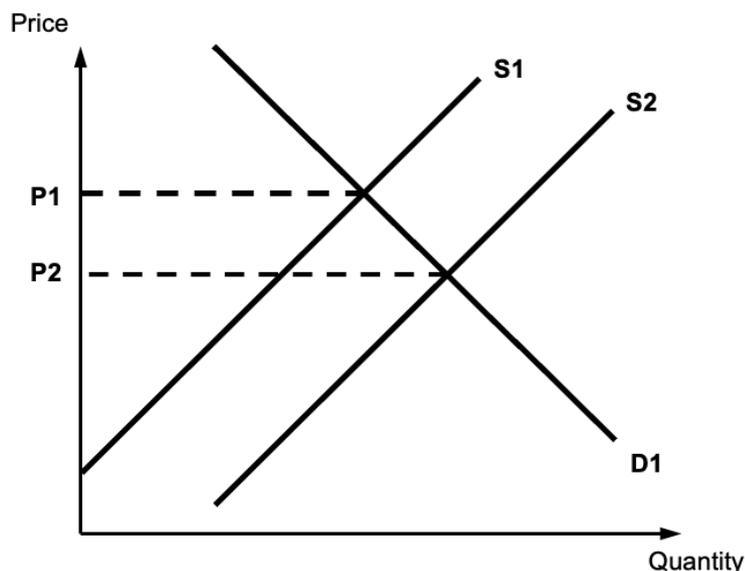


For AD/AS, the vertical axis may be Average (General) Price Level, Price Level, or CPI. The horizontal axis may be real output, real national output, real income, real national income, real GDP or real Y. A Keynesian AS is acceptable, so long as the intersections with the AD curves do not occur on the vertical section. Abbreviations are acceptable. A title is not necessary.

- (d) Using a demand and supply diagram, explain the likely effect of increased use of farm machinery on the price of agricultural goods, such as rice, in Bhutan (**Text D**, paragraph 7). **[4]**

Level		Marks
0	<i>The work does not meet a standard described by the descriptors below.</i>	0
1	<i>There is a correct diagram OR an accurate written response.</i>	1–2
	For a correctly labelled demand and supply diagram, showing an increase in supply and fall in price OR for an explanation that the use of machinery will cause (one of the following): <ul style="list-style-type: none"> • a reduction in farmers' costs • an increase in the quantity/quality of capital (factors of production) • increase productivity (efficiency) Thus increasing supply (production) and decreasing the price (of rice).	
2	<i>There is a correct diagram AND an accurate written response.</i>	3–4
	For a correctly labelled demand and supply diagram, showing an increase in supply and fall in price AND for an explanation that the use of machinery will cause (one of the following): <ul style="list-style-type: none"> • a reduction in farmers' costs • an increase in the quantity/quality of capital (factors of production) • increase productivity (efficiency), Thus increasing supply (production) and decreasing the price (of rice).	

Candidates who label diagrams incorrectly can be awarded a maximum of **[3]**.



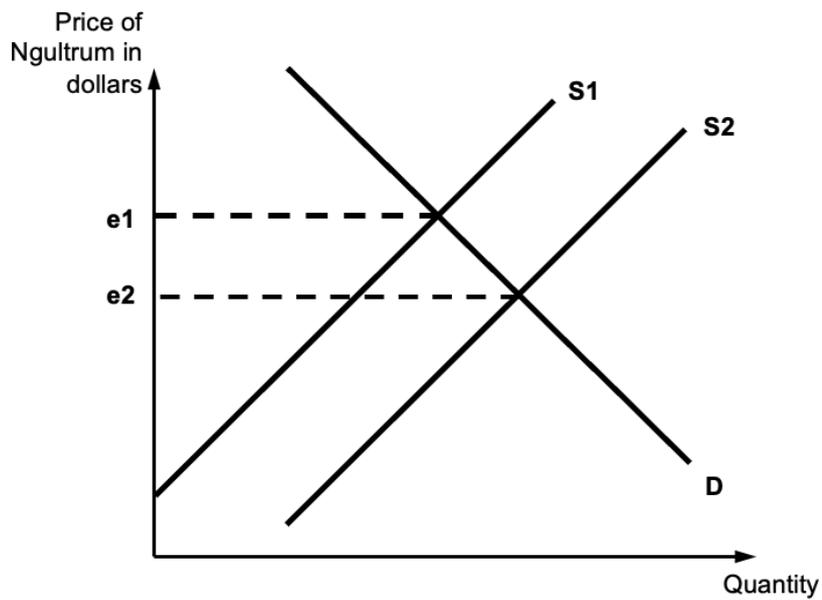
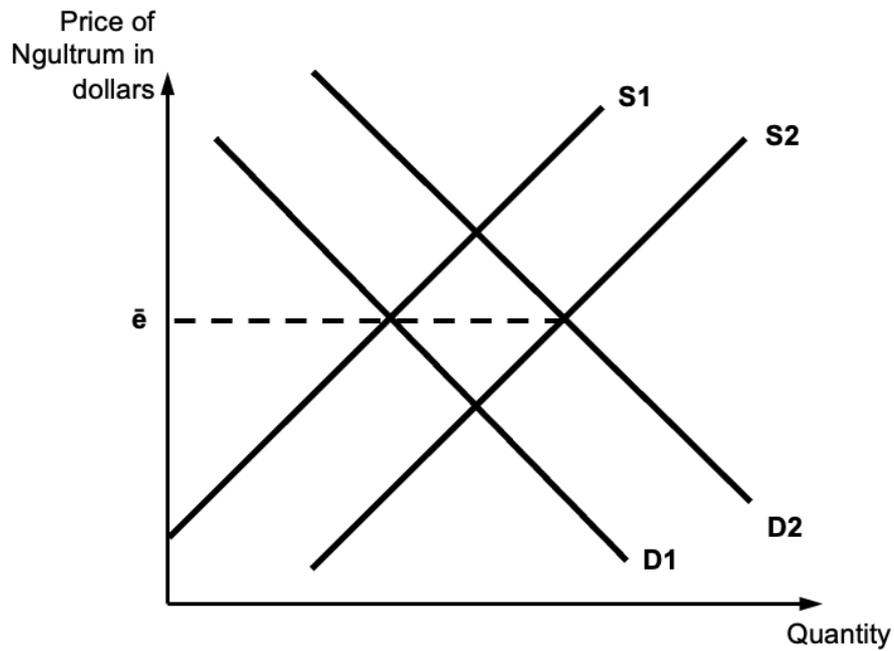
The axes can be labelled as P and Q. A title is not necessary.

- (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 from India for electricity produced in Bhutan (**Text F**).

[4]

Level		Marks
0	<i>The work does not meet a standard described by the descriptors below.</i>	0
1	<i>There is a correct diagram OR an accurate written response.</i>	1–2
	<p>For a correctly labelled exchange rate diagram, showing supply shifting right and either:</p> <ul style="list-style-type: none"> • the exchange rate decreasing • the exchange rate being maintained/returned to its original value <p>N.B. Candidates need not draw the increase in demand resulting from the increase in exports of electricity.</p> <p>OR for an explanation that the central bank could (one of the following):</p> <ul style="list-style-type: none"> • purchase foreign currencies/assets • sell ngultrums • lower the interest rate <p>In order to prevent an appreciation of the exchange rate (decrease the exchange rate)/put downward pressure on the exchange rate.</p>	
2	<i>There is a correct diagram AND an accurate written response.</i>	3–4
	<p>For a correctly labelled exchange rate diagram, showing supply shifting right and either:</p> <ul style="list-style-type: none"> • the exchange rate decreasing • the exchange rate being maintained/returned to its original value <p>N.B. Candidates need not draw the increase in demand resulting from the increase in exports of electricity.</p> <p>AND for an explanation that the central bank could (one of the following):</p> <ul style="list-style-type: none"> • purchase foreign currencies/assets • sell ngultrums • lower the interest rate <p>In order to prevent an appreciation of the exchange rate (decrease the exchange rate)/put downward pressure on the exchange rate.</p>	

Candidates who label diagrams incorrectly can be awarded a maximum of [3].



The vertical axis may be exchange rate, price/value of Ngultrum in another currency, other currency/Ngultrum or other currency per Ngultrum. The horizontal axis may be quantity or quantity of Ngultrum. All abbreviations are acceptable. A title is not necessary.

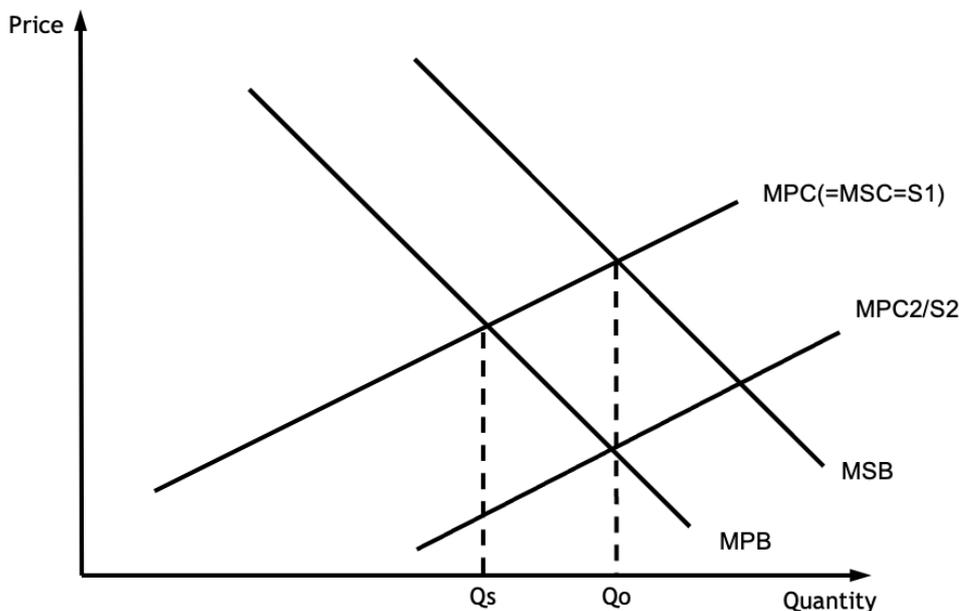
- (f) Using an externalities diagram, explain how government subsidies to improve sanitation could achieve allocative efficiency in Bhutan’s sanitation services market (Table 5).

[4]

Level		Marks
0	<i>The work does not meet a standard described by the descriptors below.</i>	0
1	<i>There is a correct diagram OR an accurate written response.</i>	1–2
	<p>For a correctly labelled externalities diagram, showing MSB higher than MPB and the MPC shifting right (downwards) to reach (or get closer to) the social optimal output.</p> <p>N.B. <i>If the shift of the MPC/S curve is not shown, the diagram may still be awarded [1], provided the positive consumption externality is fully and correctly illustrated. Alternatively, a positive externality from production diagram may be awarded [1] if it shows the correct effect of the subsidy (that is, a rightward shift of the MPC/S curve) and is otherwise fully and correctly drawn and labelled.</i></p> <p>OR</p> <p>for an explanation that government subsidies would decrease the cost of production, increasing the supply/provision/ production of sanitation services, resulting in (one of the following):</p> <ul style="list-style-type: none"> • an increase in the quantity of sanitation services at/towards Q_0 • more resources being allocated to this market • the removal/reduction of the welfare loss • a new equilibrium where $MSB=MSC$. <p>N.B. <i>If a candidate incorrectly identifies the situation as a positive production externality, resulting in a loss of mark on the diagram, this should not be penalised again in the explanation. The explanation may still be awarded up to 2 marks if it otherwise meets the markscheme requirements.</i></p>	

2	<p><i>There is a correct diagram AND an accurate written response.</i></p>	3–4
	<p>For a correctly labelled externalities diagram, showing MSB higher than MPB and the MPC shifting right (downwards) to reach (or get closer to) the social optimal output.</p> <p>N.B. <i>If the shift of the MPC/S curve is not shown, the diagram may still be awarded [1], provided the positive consumption externality is fully and correctly illustrated. Alternatively, a positive externality from production diagram may be awarded [1] if it shows the correct effect of the subsidy (that is, a rightward shift of the MPC/S curve) and is otherwise fully and correctly drawn and labelled.</i></p> <p>AND</p> <p>for an explanation that government subsidies would decrease the cost of production, increasing the supply/provision/production of sanitation services, resulting in (one of the following):</p> <ul style="list-style-type: none"> • an increase in the quantity of sanitation services at/towards Q_0 • more resources being allocated to this market • the removal/reduction of the welfare loss • a new equilibrium where $MSB=MSC$. <p>N.B. <i>If a candidate incorrectly identifies the situation as a positive production externality, resulting in a loss of mark on the diagram, this should not be penalised again in the explanation. The explanation may still be awarded up to 2 marks if it otherwise meets the markscheme requirements.</i></p>	

Candidates who label diagrams incorrectly can be awarded a maximum of [3].



The vertical axis may be labelled price, P, costs or benefits. The horizontal axis may be labelled quantity or Q. A title is not necessary.

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

[15]

Marks	Level descriptor
0	<ul style="list-style-type: none"> The work does not meet a standard described by the descriptors below.
1–3	<ul style="list-style-type: none"> The response indicates little understanding of the specific demands of the question. Economic theory is stated but it is not relevant. Economic terms are stated but they are not relevant or are used incorrectly. The response contains no evidence of synthesis or evaluation. The response contains no use of text/data or it is merely copied.
4–6	<ul style="list-style-type: none"> The response indicates some understanding of the specific demands of the question. Relevant economic theory is described. Some relevant economic terms are included. The response contains evidence of relevant but superficial synthesis or evaluation. The response contains limited use of text/data.
7–9	<ul style="list-style-type: none"> The response indicates understanding of the specific demands of the question, but these demands are only partially addressed. Relevant economic theory is partly explained. Some relevant economic terms are used appropriately. Where appropriate, relevant diagram(s) are included. The response contains evidence of appropriate synthesis or evaluation but lacks balance. The response includes some relevant information from the text/data.
10–12	<ul style="list-style-type: none"> The specific demands of the question are understood and addressed. Relevant economic theory is explained. Relevant economic terms are used appropriately. Where appropriate, relevant diagram(s) are included and explained. The response contains evidence of appropriate synthesis or evaluation that is mostly balanced. The use of information from the text/data is generally appropriate, relevant, and applied correctly.
13–15	<ul style="list-style-type: none"> The specific demands of the question are thoroughly understood and addressed. Relevant economic theory is fully explained. Relevant economic terms are used appropriately throughout the response. Where appropriate, relevant diagram(s) are included and fully explained. The response contains evidence of effective and balanced synthesis or evaluation. The use of information from the text/data is appropriate, relevant, and is used to formulate a reasoned argument supported by analysis/evaluation.

Command term

“Evaluate” requires candidates to make an appraisal by weighing up the strengths and limitations. Opinions and conclusions should be presented clearly and supported with appropriate evidence and sound argument.

Terminology may include:

- economic development
- economic growth
- sustainability
- equity
- economic well-being
- externalities
- opportunity costs/choice
- absolute/relative poverty
- nominal/real GDP

Economic models to support analysis may include:

- a poverty cycle diagram (could link to improved health and education).
- a Lorenz curve diagram to show reduced income inequality (Gini coefficient, **Table 5**)
- a tariff diagram (**Text F**)
- a labour market diagram
- a PPC diagram
- an AD/AS diagram
- an externalities diagram.

N.B. diagrams that have already been given in answers to parts (c), (d), (e) or (f), and then referred to in part (g), should be rewarded.

Candidates are not expected to cover every possible type of strategy/policy in order to achieve high marks.

Economic Development strategy – possible policies	Strengths in furthering Economic development	Limitations in furthering economic development
Aim to increase GNH - measuring income inequality, environmental conservation, sustainable development, and gender equality (Text D , paragraph 1).	<ul style="list-style-type: none"> • Considers development measures that are of wider scope than those measured by GDP per capita and HDI • Improvement in life expectancy and income equality, reduction of poverty etc (Table 5) • Improvement in HDI (Figure 1). 	<ul style="list-style-type: none"> • May hinder improvement of agricultural productivity • Could restrict growth (Text D, paragraph 7).
Trade liberalization: FTA with India (Text F).	Probably increases revenue from exports, which will contribute to economic growth and possibly ultimately development.	<ul style="list-style-type: none"> • Trade reliance (80% of trade) on India creates vulnerability to external shocks (Text F) • Could result in a significant drop in government revenue from tariffs.
Sales of electricity to India (Text D , paragraph 4).	<ul style="list-style-type: none"> • Helps to finance import spending, which may contribute to development 	Dependence on trade with India suggests the need to diversify exports (Text F)

	<ul style="list-style-type: none"> • Helps to finance government spending 	
Utilising foreign aid by accepting grants and loans from India (Text D , paragraph 3).	Fills the savings gap (in the poverty cycle), allowing for increased investment spending by government.	<ul style="list-style-type: none"> • loans taken from India need to be repaid with interest • implications for the BOP current account (Table 4).
Protection of forests (Text D , paragraph 1).	Promotes environmental conservation efforts.	May limit growth potential.
Investment in hydropower and other infrastructure (Text D , paragraph 2 & 4).	<ul style="list-style-type: none"> • Provides electricity to rural areas and at lower prices, allowing households greater access to necessities (Text D, paragraph 2). • Increased revenue for state-owned enterprises, which help finance development through provision of healthcare and education (Text D, paragraph 3&4). 	Transportation networks are still inadequate, indicated by “high transport costs” (Text D , paragraph 5).
State control of production and distribution of electricity (Text D , paragraph 3).	Ensures access to electricity in vulnerable communities (Text D , paragraphs 2&3).	Public control may reduce efficiency and lead to financial losses (Text D , paragraph 3).
Investment in healthcare and education (Text D , paragraph 3).	<ul style="list-style-type: none"> • Adds to human capital and therefore productivity/potential output • Provision of education may help reduce the high youth unemployment, especially for women (Text E, paragraph 1) • Better healthcare leads to increase in life expectancy (Table 5). 	<ul style="list-style-type: none"> • Opportunity cost of government spending • Lack of job opportunities and lack of access to finance for entrepreneurship still exist (Text E, paragraph 2) • Progress on gender equality (Text D, paragraph 1) is questionable, given the high rate of female youth unemployment, (Text E) • Will place burdens on healthcare sector as population ages.
Expansion of essential infrastructure (Text A , paragraph 4).	<ul style="list-style-type: none"> • Improves quality/quantity of resources • May encourage private sector investment by lowering transport costs (Text A, paragraph 5). 	<ul style="list-style-type: none"> • Opportunity cost of government spending • Over reliance on public sector with the private sector facing a lack of investment (Text E, paragraph 2) • Infrastructure construction may lead to negative

		externalities, resulting in a conflict with GNH aims.
Tax on tourists (Text D , paragraph 5).	<ul style="list-style-type: none"> • Supports sustainable development • Provides government revenue to finance development. 	<ul style="list-style-type: none"> • May reduce competitiveness of the tourism sector • Resulting fall in incomes of workers in the tourism sector may make it difficult for them to break the poverty cycle.
Partnership with UN agency to provide funds for investment in agricultural sector (Text D , paragraph 7).	<ul style="list-style-type: none"> • Provides infrastructure and investment in agriculture where wages are low. • Increase in productivity may help farmers break out of the poverty cycle • May reduce urban-rural inequalities. • Improves food security and nutrition • May reduce need for food imports (Text D, paragraph 6). • Improved infrastructure (roads) may also improve access to jobs and schools/hospitals. 	<ul style="list-style-type: none"> • Could lead to dependency on foreign aid • Most agricultural output is not marketed. Subsistence farming may limit potential productivity gains (Text D, paragraph 6).
Regulations on chemical fertilisers (Text D , paragraph 7).	Aim to make farming practices more sustainable.	Increases in productivity may be limited by the restrictions on use of fertilisers (Text D , paragraph 7).
Fixed exchange rate (to the Indian rupee) (Text F).	<ul style="list-style-type: none"> • Trade with India is facilitated • Costs of necessities that are imported (fuel and rice) are less volatile. 	<ul style="list-style-type: none"> • Restricts monetary policy freedom • Requires central bank intervention.

Examiners should be aware that candidates may take a different approach which, if appropriate, should be rewarded.