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2

91224



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## Level 2 Economics, 2015

### 91224 Analyse economic growth using economic concepts and models

2.00 p.m. Thursday 12 November 2015  
Credits: Four

Achievement	Achievement with Merit	Achievement with Excellence
Analyse economic growth using economic concepts and models.	Analyse economic growth in depth using economic concepts and models.	Analyse economic growth comprehensively using economic concepts and models.

Check that the National Student Number (NSN) on your admission slip is the same as the number at the top of this page.

**You should attempt ALL the questions in this booklet.**

If you need more room for any answer, use the extra space provided at the back of this booklet.

Check that this booklet has pages 2–11 in the correct order and that none of these pages is blank.

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**Achievement**

**TOTAL**

**8**

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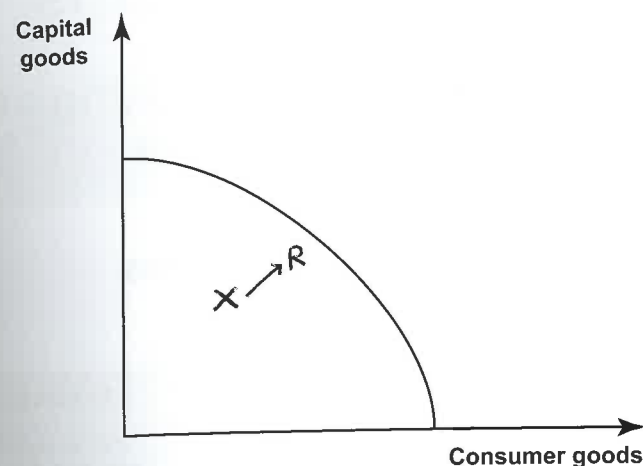
# QUESTION ONE: PRODUCTION POSSIBILITY FRONTIER

The unemployment rate, as measured by the Household Labour Force Survey (HLFS), has been trending downwards from 7.3% to 5.4% over the period September 2012 to September 2014.

Sources (adapted): <http://www.parliament.nz/en-nz/parl-support/research-papers/00PLEcoRP2014011/unemployment-and-employment-statistics-the-household-labour>  
[http://www.stats.govt.nz/browse\\_for\\_stats/income-and-work/employment\\_and\\_unemployment/HouseholdLabourForceSurvey\\_HOTPSep14qtr.aspx](http://www.stats.govt.nz/browse_for_stats/income-and-work/employment_and_unemployment/HouseholdLabourForceSurvey_HOTPSep14qtr.aspx)

- (a) (i) Identify ONE point on Graph One below that represents unemployment. Label the point with an X.

Graph One: Production Possibility Frontier



- (ii) Explain in detail the impact of an increase in Real Gross Domestic Product (Real GDP). In your answer:

- on Graph One show the impact of an increase in Real GDP
- explain in detail how the increase in Real GDP will affect economic growth
- refer to Graph One.

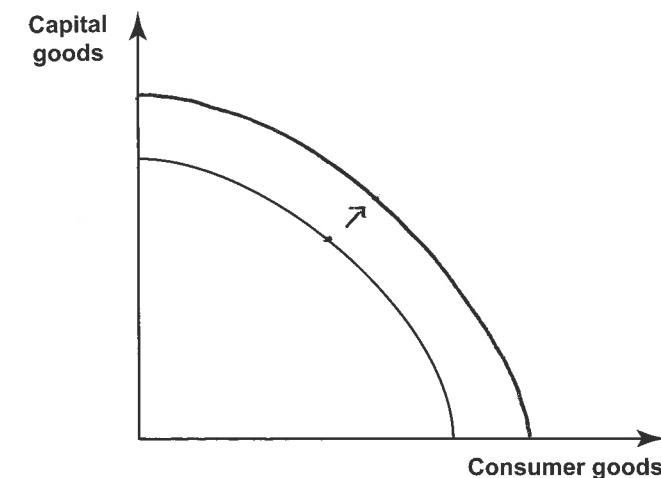
An increase in Real GDP will result in an increase in demand for labour as more ~~An increase in Real GDP~~ goods are being produced. An increase in Real GDP will increase economic growth as there is more output, employment and export receipts, ~~due to~~ in the economy.

- (b) Compare and contrast the impact on economic growth of an increase in Real Gross Domestic Product (Real GDP) with an increase in Productive Capacity.

In your answer:

- on Graph Two show the impact of an increase in Productive Capacity
- explain in detail how the increase in Productive Capacity will affect economic growth
- explain in detail the different impact on economic growth that an increase in Real GDP has when compared with an increase in Productive Capacity
- refer to Graph One and Graph Two.

Graph Two: Production Possibility Frontier



An increase in productive capacity means the economy now has the capacity to produce more goods due to the increase in resources or level of technology. This will result in an increase in economic activity as the economy can now produce more goods, therefore Real GDP will increase <sup>even more</sup> signalling an increase in economic growth. An increase in Real GDP has less of an effect on economic growth than an increase in productive capacity as an increase in productive capacity means the economy has the potential to produce a significantly increased amount of goods than it.

There is more space for your answer to Question One on the following page.

Just real GDP increased.

Productive capacity is a measure of economic growth along with Real GDP so the increase of both sparks an increase in economic growth.

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N2

## QUESTION TWO: THE IMPACT OF CLIMATE CHANGE ON ECONOMIC GROWTH

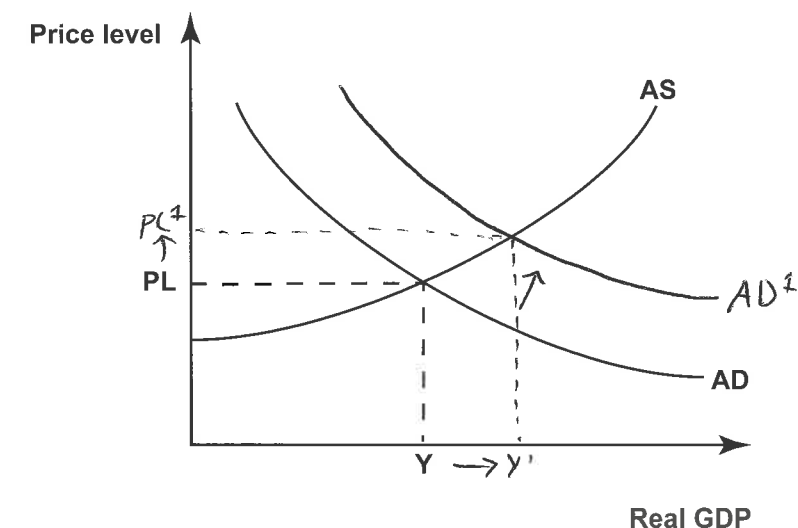
ASSESSOR'S  
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One view of the impact of climate change on the economy is that it will provide business opportunities as households, business, and the Government increase spending on protection from its worst influences.

- (a) Explain in detail the impact of climate change on economic growth in New Zealand. In your answer:

- fully label on Graph Three the impact of the increase in spending on economic growth
- explain in detail the impact that you have shown on Graph Three.

Graph Three: AD/AS model of the New Zealand economy



The government is increasing spending on protection against climate change. This will affect aggregate demand AD as  $AD = C + I + G + (X - M)$ . This will cause the AD curve to shift out to  $AD'$ . An increase in aggregate demand causes an increase in economic growth as Real GDP and price levels increase. PL will shift to  $PL'$  and Y will shift to  $Y'$  to show the increase in price level and Real GDP.



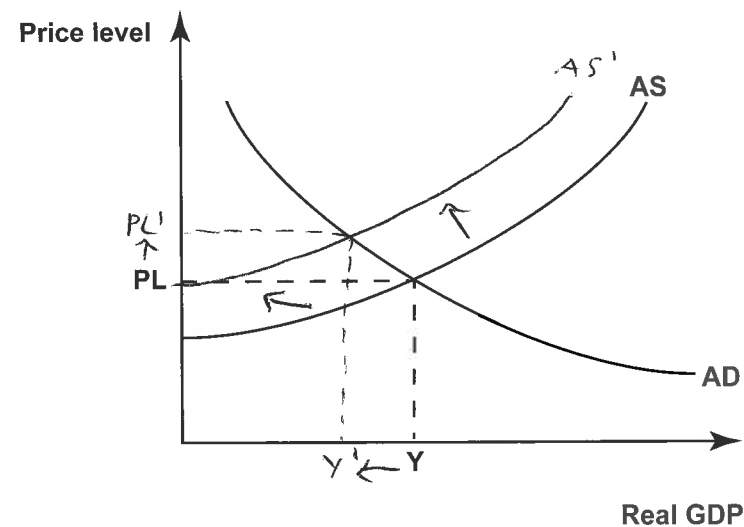
An alternative view of the impact of climate change on the economy is that it will increase costs of production because of higher costs of obtaining resources or changing production methods.

- (b) Discuss the effect of climate change on economic growth in New Zealand as the impacts of climate change intensify over the next 50 years.

In your answer:

- fully label Graph Four to show the impact of increasing costs of production
- explain in detail the impact that you have shown on Graph Four
- explain in detail whether increasing spending or increasing costs of production would have a greater impact on economic growth in New Zealand over the next 50 years.

Graph Four: AD/AS model of the New Zealand economy



An increase in costs of production will affect aggregate supply. Therefore the AS curve will shift back to  $AS'$  to show a decrease in supply. This will cause a decrease in Real GDP (output) as firms are supplying less due to the higher costs of production. Y will shift back to  $Y'$ . The price level will rise due to increased production costs so PL will move up to  $PL'$ .

Increased costs of production will have more of an effect on economic growth in NZ as the climate change will result in less resources available and an increased cost of changing production methods. This increased production cost will most likely keep rising as more and more resources disappear or become unavailable and production methods change become <sup>more</sup> expensive, whereas increased spending won't be able to offset the effects of the constantly increasing costs of production over the next 50 years.

### QUESTION THREE: THE UNEVEN IMPACT OF ECONOMIC GROWTH

The proposed Ruataniwha Water Storage Scheme will create an 83-metre-high dam located on the upper Makaroro River in Central Hawke's Bay, where it will create a storage reservoir. The reservoir will supply water to irrigate approximately 25 000 hectares of land, primarily in the Ruataniwha Plains area of Central Hawke's Bay district. The scheme also includes a plan for a small (6.5 MW) renewable energy hydroelectric power station to be constructed adjacent to the dam (capable of supplying electricity equivalent to 2 200 average households).

Source (adapted): [http://www.epa.govt.nz/Resource-management/Tukituki/lodgement-notification/about\\_tukituki\\_proposal/Pages/default.aspx](http://www.epa.govt.nz/Resource-management/Tukituki/lodgement-notification/about_tukituki_proposal/Pages/default.aspx).

Objections to the scheme ranged from the earthquake risk, inadequate protection of ecosystems, and existing high levels of pollution, to reduced access to water.

Source (adapted): <http://www.epa.govt.nz/Resource-management/Tukituki/Submissions/Pages/Summary%20and%20Submissions.aspx>

Compare and contrast the impacts that the Ruataniwha Water Storage Scheme could have on the economic well-being of businesses and households.

In your answer, explain in detail:

- one example of a business that may be better off
- one example of a business that may be worse off
- one example of how households may be better off
- one example of how households may be worse off.

The proposed Ruataniwha water storage scheme may benefit or negatively affect certain households and businesses.

A business that may be better off with the RWSS may be dairy farmers or vineyard firms as water is a vital production input. Having better access to the water to irrigate paddocks or gardens will ~~bring down~~ make the production process faster and more efficient. Cutting time off production will mean the businesses can produce more in less time. A business that may be worse off could be the ~~energy~~<sup>electricity</sup> companies who already supply electricity to the homes.

and businesses in the area as they may lose customers and become less competitive. Households may be better off with the RWSS as they have easier access to ~~new~~ renewable sustainable power.

Households may be worse off as they have ~~less~~ reduced access to water and potential to have cut off power and water if an earthquake happens to occur.

The different effects on different households and businesses result in an uneven impact of economic growth. While some businesses benefit and grow as a result of the RWSS, others will struggle with new competition in the water and electricity sectors, and their economic well-being will suffer.

There is more space for your answer to Question Three on the following page.

## **EXEMPLAR Score 08**

Question 1 – N2

Q 1(a)(i) – X placed inside of frontier – correct

Q 1(a)(ii) – arrow towards frontier – correct

Explanation – no mention of economic growth. Candidate discusses exports, which is incorrect.

Q1(b) – graph shift correctly

Explanation – candidate mentions “economic growth” and increase in resources or technology BUT no link to increase in future output.

MUST have 1 x explanation correct in Q1 to achieve above N2

Question 2 – A4

Q 2(a) – curve shifted and labelled correctly

Explanation – candidate only mentions increase in Government spending will lead to increase in economic growth. (Achieved evidence only)

Q 2(b) – curve shifted and labelled correctly

Explanation – candidate mentions increased cost of production decreasing Real GDP but no decrease in economic growth. This must be mentioned in (a) or (b) at least once in order to get credit for both explanations.

Question 3 – N2

Business positive – who and why (make production process faster) but no implications of this (A evidence)

Business negative – electricity companies not accepted.

Household positive – easier access to renewable power not accepted

Household negative – potential to have reduced access to power and water if earthquake (A evidence)

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**Achievement**

**TOTAL**

**10**

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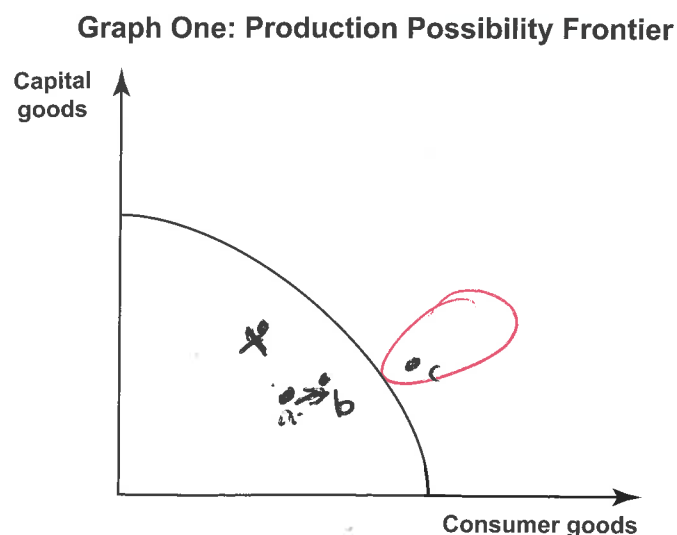
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- (a) (i) Identify ONE point on Graph One below that represents unemployment. Label the point with an X.



- (ii) Explain in detail the impact of an increase in Real Gross Domestic Product (Real GDP). In your answer:

- on Graph One show the impact of an increase in Real GDP
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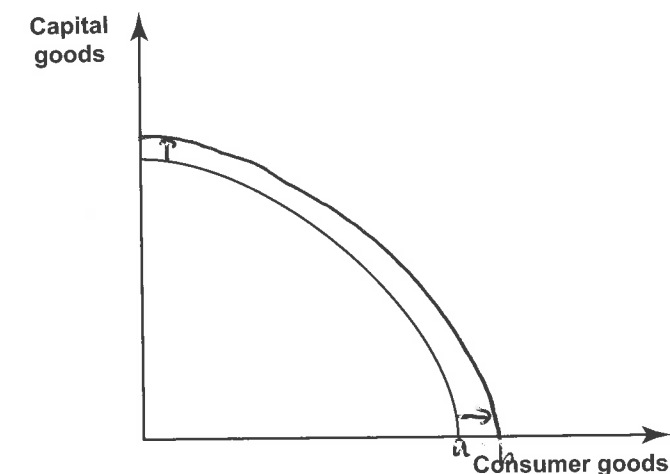
An increase in real GDP will result in a move closer to the PPF as illustrated on graph one with a move from point ~~a~~ to point b. This is due to the only way to increase real GDP is to be producing within the production possibility frontier because producing outside (point c) is not possible. An increase in Real GDP is an increase in economic growth as higher real output will result in economic growth such as more jobs.

- (b) Compare and contrast the impact on economic growth of an increase in Real Gross Domestic Product (Real GDP) with an increase in Productive Capacity.

In your answer:

- on Graph Two show the impact of an increase in Productive Capacity
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Graph Two: Production Possibility Frontier



An increase in productive capacity ~~will~~ is unlikely to affect the current Real GDP but it results in the possibility of greater increase in the Real GDP for the future. The productive capacity only measures how much the country can produce if all resources are used and all technology is used and it does not show where the country is producing at just where it ~~is~~ <sup>can be</sup> producing at. An increase in Real GDP will have an immediate ~~effect~~ impact on economic growth as more ~~is~~ <sup>is being produced and</sup> employment increases this is a contrast with the increase of productive capacity which shown on Graph 2 as a shift from curve a to curve b means in the future.

There is more space for your answer to Question One on the following page.



economic growth has the ability to increase by more (distance a → b on Graph two) in the future as opposed to Real GDP which has a more immediate impact on economic growth.

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m5

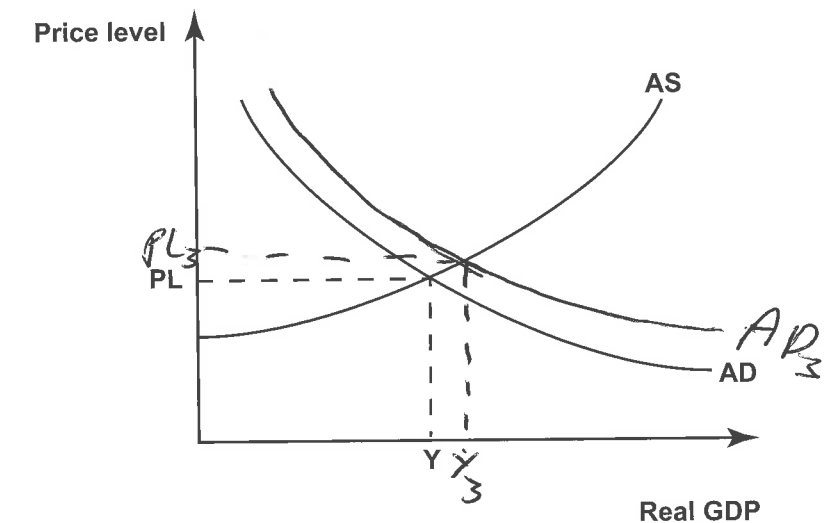
## QUESTION TWO: THE IMPACT OF CLIMATE CHANGE ON ECONOMIC GROWTH

ASSESSOR'S  
USE ONLY

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  - explain in detail the impact that you have shown on Graph Three.

Graph Three: AD/AS model of the New Zealand economy



As households, businesses and the government spend more to protect them from climate change there is an increase in: Consumption expenditure (C) because of household spending increasing, Investment as businesses are more likely to borrow to pay for their protection and also Government expenditure as the government spends more to protect from climate change. These are 3 factors of Aggregate Demand therefore Aggregate Demand will increase from AD to AD<sub>3</sub> resulting in an increase in Real GDP from Y to Y<sub>3</sub> and also an increase in price levels (inflation) from PL to PL<sub>3</sub>.

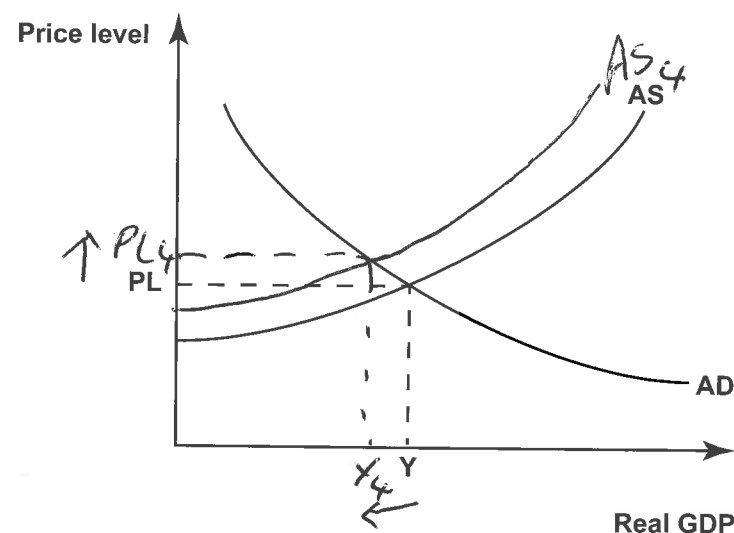
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In your answer:

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Graph Four: AD/AS model of the New Zealand economy



Graph 4 illustrates an increase in the cost of production for firms which as a result decreases Aggregate Supply from AS to AS<sub>4</sub> which results in a decrease in real GDP from X to Y and an increase in inflation from PL to PL<sub>4</sub>.

Increasing cost of production is more likely to have a greater impact on economic growth in New Zealand over the next 50 years as climate change intensifies there will be a need to change production methods and the increasing difficulty to obtain resources.

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and these cost will continue as the climate worsens meaning it will be continuing to be a high cost for firms whereas the increased spending can only go on for so long and though it may have a higher immediate affect in the long term ~~over~~ (over the next 50 years) as ~~it is~~ increasing costs of production.

ASSESSOR'S  
USE ONLY

### QUESTION THREE: THE UNEVEN IMPACT OF ECONOMIC GROWTH

The proposed Ruataniwha Water Storage Scheme will create an 83-metre-high dam located on the upper Makaroro River in Central Hawke's Bay, where it will create a storage reservoir. The reservoir will supply water to irrigate approximately 25 000 hectares of land, primarily in the Ruataniwha Plains area of Central Hawke's Bay district. The scheme also includes a plan for a small (6.5 MW) renewable energy hydroelectric power station to be constructed adjacent to the dam (capable of supplying electricity equivalent to 2 200 average households).

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In your answer, explain in detail:

- one example of a business that may be better off
- one example of a business that may be worse off
- one example of how households may be better off
- one example of how households may be worse off.

Farmers in the central Hawke's Bay are more likely to be better off as the reservoir will open up an easier to access and less expensive supply of water for irrigation this will likely decrease their cost of production as the water being supplied by the reservoir is ~~more~~ likely to be a more affordable alternative for them due to its close proximity.

The plan for a small renewable energy hydro electric power station could result in being better off for households as it is likely to be a cheaper and local alternative also people like to endorse eco-friendly things.

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Such as a renewable power station because it makes people feel as if they are helping the environment.

Households will be worse off in ways such as pollution particularly if there is an existing high level of pollution present this pollution can have many adverse ~~neg~~ negative effects on households from threatening native forest wildlife on top of destroying ecosystems particularly those ecosystems within the river itself. This hurts those who hunt/fish recreationally as well as most households in general.

There is more space for your answer to Question Three on the following page.

## **EXEMPLAR Score 10**

### Question 1 – M5

Q 1(a)(i) – X placed inside of frontier – correct

Q 1(a)(ii) – arrow towards frontier – correct (point c explained in written information below)

Explanation – Increase in output, increase in economic growth and basic to model BUT no WHY. (A evidence)

Q1(b) – graph shift correctly

Explanation – candidate mentions “economic growth”, specifically links to model (a-b) and how this results in the possibility of greater increase in the Real GDP in the future. (M evidence)

### Question 2 – A3

Q 2(a) – curve shifted correctly and labelled correctly

Explanation – candidate mentions increase in Consumption, Investment and Government spending will lead to increase in Real GDP (but not economic growth). (Achievement evidence only)

Q 2(b) – curve shifted correctly

Explanation – candidate mentions increased cost of production decreasing Real GDP but no decrease in economic growth. This must be mentioned in (a) or (b) at least once in order to get credit for both explanations.

### Question 3 – N2

Business positive – who and why (decrease costs of production) but no implications of this (A evidence)

Business negative – electricity companies not accepted.

Household positive – cheaper power not accepted

Household negative – pollution destroying recreational fishing accepted for A