



International Baccalaureate®
Baccalauréat International
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Economics

Higher level and standard level

Specimen papers 1, 2 and 3

For first examinations in 2022

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Economics
Higher level
Paper 1

Specimen paper

1 hour 15 minutes

Instructions to candidates

- Do not turn over this examination paper until instructed to do so.
- You are not permitted access to a calculator for this paper.
- Answer one question.
- Use fully labelled diagrams where appropriate.
- The maximum mark for this examination paper is **[25 marks]**.

Answer **one** question.

1. (a) Explain **two** ways a government might respond to the existence of asymmetric information in a market. [10]
(b) Using real-world examples, evaluate different approaches to managing common access resources. [15]
 2. (a) Explain **two** tools open to a central bank to conduct expansionary monetary policy. [10]
(b) Using real-world examples, evaluate the effectiveness of monetary policy to achieve low unemployment. [15]
 3. (a) Explain how currency depreciation might affect a country's current account balance. [10]
(b) Using real-world examples, discuss the possible implications of a persistent current account deficit. [15]
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Markscheme

Specimen paper

Economics


















Higher level















Paper 1

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The following are the annotations available to use when marking responses.

Annotation	Explanation
	Attempts Evaluation
	Answers the Question
	Benefit of Doubt
	Clear Knowledge Shown
	Cross — Incorrect Point
	Effective Evaluation
	Good Analysis
	Good Definition
	Good Diagram
	Good Example
	Good Explanation
	Highlight tool
	Incorrect Labelling
	Irrelevant
	Inappropriate Use
	Lacks Depth
	Lacks Logical Structure
L0	Level 0
L1	Level 1
L2	Level 2
L3	Level 3
L4	Level 4

	Not Answered Question
	No Definition
	No Examples
	On-page comment text box (for adding specific comments)
	Poor Diagram
	Poorly Expressed
	Question mark — Unclear
	Apply to blank pages
	Theory is Clearly Explained
	Theory is Not Clearly Explained
	Tick — Correct Point (colourable)
	Too Vague
	Underline tool
	Unbalanced Response

You **must** make sure you have looked at all pages. Please put the **SEEN** annotation on any blank page, to indicate that you have seen it.

Use the question-specific markscheme together with the markbands. Award up to the maximum marks as indicated.

1. (a) Explain **two** ways a government might respond to the existence of asymmetric information in a market. **[10]**

Answers **may** include:

- Definition: asymmetric information.
- Explanation: of adverse selection, moral hazard, and government responses such as regulation, legislation or the provision of information.
- Diagram: not needed for this question.

Assessment Criteria

Part (a) 10 marks

Marks	Level descriptor
0	<ul style="list-style-type: none"> • The work does not reach a standard described by the descriptors below.
1–2	<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.
3–4	<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.
5–6	<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.
7–8	<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 mostly appropriately. • Where appropriate, relevant diagram(s) are included and explained.
9–10	<ul style="list-style-type: none"> • The specific demands of the question are 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.

- (b) Using real-world examples, evaluate different approaches to managing common access resources.

[15]

Answers may include:

- Definition: common access resources.
- Explanation: of different government approaches to this problem, legislation and regulation, collective self-governance, tradable permits, carbon taxes and international agreements.
- Diagram: showing negative production externalities.
- Synthesis (evaluate): the strengths and limitations of the above policies in addressing the problems of managing common access resources.
- Examples: a real-world common access resource and policies used by governments eg Antarctic Treaty System, Nile Agreement etc.

N.B. It should be noted that definitions, theory and examples that have already been given in part (a), and then referred to in part (b), should be rewarded.

Assessment Criteria

Part (b) 15 marks

Marks	Level descriptor
0	<ul style="list-style-type: none"> • The work does not reach 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. • The response contains no evidence of synthesis or evaluation. • A real-world example(s) is identified but it is irrelevant.
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 superficial synthesis or evaluation. • A relevant real-world example(s) is identified.
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. • A relevant real-world example(s) is identified and partly developed in the context of the question.
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 mostly appropriately. • Where appropriate, relevant diagram(s) are included and explained. • The response contains evidence of appropriate synthesis or evaluation that is mostly balanced. • A relevant real-world example(s) is identified and developed in the context of the question.
13–15	<ul style="list-style-type: none"> • The specific demands of the question are 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. • A relevant real-world example(s) is identified and fully developed to support the argument.

2. (a) Explain **two** tools open to a central bank to conduct expansionary monetary policy. **[10]**

Answers **may** include:

- Definition: expansionary monetary policy.
- Explanation: of any **two** of the following instruments—open market operations, minimum reserve requirement, base rate changes and quantitative easing.
- Diagram: money market diagram to show interest rates falling or AD/AS diagram.

Assessment Criteria

Part (a) 10 marks

Marks	Level descriptor
0	<ul style="list-style-type: none"> • The work does not reach a standard described by the descriptors below.
1–2	<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.
3–4	<ul style="list-style-type: none"> • The response indicates some understanding of the specific demands of the question. • Relevant theory is described. • Some relevant economic terms are included.
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9–10	<ul style="list-style-type: none"> • The specific demands of the question are 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.

- (b) Using real-world examples, evaluate the effectiveness of monetary policy to achieve low unemployment.

[15]

Answers may include:

- Definition: monetary policy, low unemployment.
- Explanation: of the impacts that might occur on the economy as a result of its use on employment, growth, inflation and trade.
- Diagram: AD/AS diagram.
- Synthesis (evaluate): strengths and limitations of monetary policy in achieving low unemployment. Monetary policy is incremental, easily changed, flexible, fast to implement, does not burden the government's budget; it is less effective with close to zero interest rates, and ineffective when business/consumer confidence is low; effectiveness may depend on the type of unemployment.
- Examples: real-world examples where governments have attempted to lower unemployment using monetary policy.

N.B. It should be noted that definitions, theory and examples that have already been given in part (a), and then referred to in part (b), should be rewarded.

Assessment Criteria

Part (b) 15 marks

Marks	Level descriptor
0	<ul style="list-style-type: none"> • The work does not reach 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. • The response contains no evidence of synthesis or evaluation. • A real-world example(s) is identified but it is irrelevant.
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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 mostly appropriately. • Where appropriate, relevant diagram(s) are included and explained. • The response contains evidence of appropriate synthesis or evaluation that is mostly balanced. • A relevant real-world example(s) is identified and developed in the context of the question.
13–15	<ul style="list-style-type: none"> • The specific demands of the question are 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. • A relevant real-world example(s) is identified and fully developed to support the argument.

3. (a) Explain how currency depreciation might affect a country's current account balance. **[10]**

Answers **may** include:

- Definition: depreciation, current account balance.
- Explanation: that a depreciation will make imports more expensive and exports cheaper but relative elasticities of demand will determine changes to volumes and thus influence the current account, Marshall-Lerner.
- Diagram: exchange rate, J-curve or AD/AS diagram.

Assessment Criteria

Part (a) 10 marks

Marks	Level descriptor
0	<ul style="list-style-type: none"> • The work does not reach a standard described by the descriptors below.
1–2	<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.
3–4	<ul style="list-style-type: none"> • The response indicates some understanding of the specific demands of the question. • Relevant theory is described. • Some relevant economic terms are included.
5–6	<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.
7–8	<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 mostly appropriately. • Where appropriate, relevant diagram(s) are included and explained.
9–10	<ul style="list-style-type: none"> • The specific demands of the question are 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.

- (b) Using real-world examples, discuss the possible implications of a persistent current account deficit.

[15]

Answers may include:

- Definition: current account deficit.
- Explanation: that exchange rates may depreciate, interest rates may rise to attract financial capital to help pay for the deficit. Foreign ownership of domestic assets may increase, debt may increase, credit ratings may be adversely affected, economic growth may be lowered, government policy responses may include use of fiscal and monetary policy.
- Diagram: AD/AS or exchange rate diagram depending on the implications chosen.
- Synthesis (discuss): the magnitude of the deficit, the proportion of national income it represents, whether borrowing is necessary to finance it, the composition of the deficit (capital or consumer goods), the impact on the currency, etc.
- Examples: real-world examples of countries which have experienced persistent current account deficits.

N.B. It should be noted that definitions, theory, and examples that have already been given in part (a), and then referred to in part (b), should be rewarded.

Assessment Criteria

Part (b) 15 marks

Marks	Level descriptor
0	<ul style="list-style-type: none"> • The work does not reach 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. • The response contains no evidence of synthesis or evaluation. • A real-world example(s) is identified but it is irrelevant.
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 superficial synthesis or evaluation. • A relevant real-world example(s) is identified.
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. • A relevant real-world example(s) is identified and partly developed in the context of the question.
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 mostly appropriately. • Where appropriate, relevant diagram(s) are included and explained. • The response contains evidence of appropriate synthesis or evaluation that is mostly balanced. • A relevant real-world example(s) is identified and developed in the context of the question.
13–15	<ul style="list-style-type: none"> • The specific demands of the question are 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. • A relevant real-world example(s) is identified and fully developed to support the argument.

Economics
Higher level
Paper 2

Specimen paper

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]**.

Answer **one** question.

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

Text A — Overview of Nigeria

- 1 With a population of 173 million people, Nigeria is the most populated country in Africa and accounts for 47 % of West Africa's population. It is the biggest oil exporter in Africa and also has the largest natural gas reserves in the continent.
- 2 **Economic growth** is estimated to have been 6.1 % in 2014, owing to continued strong performance mainly in services, but also industry (apart from oil mining) and agriculture. The oil and gas sector was in decline, although at a slower rate than in the previous year. Revenues from oil and gas were estimated to have declined by 1.3 %, relative to a decline of 13.1 % in 2013. The sharp decline in oil prices since the third quarter of 2014 has posed major challenges to the country's current account balance and public finances. Oil contributes close to 90 % of export revenues and roughly 75 % of the country's total budget revenues.
- 3 Lower oil prices will continue to pose strong challenges for public finance at all levels of government during the year and will also represent a major constraint on the ability of the new government to introduce some of its ambitious programs. It is focusing on anti-corruption, the economy, including jobs and unemployment, and security.
- 4 In the North East of Nigeria, Boko Haram, an extremist group, remains a threat. Millions of displaced persons require assistance. There has been major destruction of infrastructure, loss of lives and increased poverty in this region. The government will have a difficult time financing the major programs that it wants to introduce, as well as reconstructing the North East devastated by the activities of the violent extremists.
- 5 The major medium-term challenge for the government is to accelerate the creation of productive jobs through private sector growth and to make improvements in education (skills). So far, the pace of job creation has been inadequate, leading to increasing frustration among underemployed Nigerian youth.

Text B — Oil spills in Nigeria

- 1 In January 2015, Royal Dutch Shell, a multinational oil company, finally agreed to pay more than US\$83 million to residents of a Nigerian fishing community that was devastated by two oil spills in 2008. This was the largest ever compensation related to an oil spill in Nigeria, a country plagued by oil-related **market failure**.
- 2 Over 15 000 residents in the town of Bodo will each receive about US\$3 250, adding up to approximately US\$53 million. The remaining money will go into a community fund for health clinics, education centers and other projects.
- 3 In 2006, the Nigerian government asked the United Nations Environment Programme to study the extent of delta oil pollution. In its report, published in 2011, the agency recommended that the government establish a fund with an initial investment of US\$1 billion. The Nigerian government and the oil industry should finance the fund, the agency said.

(This question continues on the following page)

(Question 1 continued)

- ④ Now, in August 2015, the Nigerian government has finally put in place a fund from which to finance cleanup efforts in one of the world’s most contaminated areas. However, there is little money in the account and the companies responsible for the spills are not required to pay very much. The Nigerian government has set aside only US\$10 million and Shell, a leading contributor to the region’s contamination, is only required to finance 30 % of the fund.

Text C — Nigeria Hikes Key Rate to 14 % in July 2016

The central bank of Nigeria raised its base interest rate to 14 % in July 2016. It was the second rate increase in the year, after the central bank abandoned the fixed exchange rate to the US dollar in June. Since then, the naira, Nigeria’s currency, plunged more than 55 % to an all-time low. In addition, the inflation rate kept its upward trend and reached 16.5 % in June, the highest since 2005.

Table 1: Economic data for Nigeria

	Previous data	2015 data
GDP (real growth rate, %)	5.4 (2013)	2.7
GDP per capita (US\$ PPP)	5900 (2013)	6100
Unemployment rate (%)	10.3 (2013)	8.9
Public debt (of GDP, %)	10.8 (2014)	11.7
Inflation rate (%)	8 (2014)	9
Central bank interest rate (%)	4.25 (2010)	10.15
Current account balance (US\$)	1.28 billion (2014)	–11.92 billion
External debt (US\$)	18.76 billion (2013)	20.93 billion

Table 2: Development data for Nigeria

	2010	2014
Human Development Index (HDI)	0.493	0.514
Gini index	0.40	0.43
Life expectancy at birth (years)	51.3	52.8
Adult literacy rate (% ages 15 and older)	51.1	51.1

(This question continues on page 5)

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(Question 1 continued)

- (a) (i) Define the term *economic growth* indicated in bold (Text A, paragraph ②). [2]
- (a) (ii) Define the term *market failure* indicated in bold (Text B, paragraph ①). [2]
- (b) (i) Using information from Text A, paragraph ①, and Table 1, calculate the GDP in US\$ PPP for Nigeria for 2015. [3]
- (b) (ii) Draw a demand and supply diagram to show how oil prices may have changed in the third quarter of 2014 (Text A, paragraph ②). [2]
- (c) Using a market failure diagram, explain how the “two oil spills in 2008” could represent a negative externality (Text B, paragraph ①). [4]
- (d) Using an AD/AS diagram and information from Text C, explain the likely cause of the increasing inflation rate. [4]
- (e) Using an exchange rate diagram, explain how the increase in the interest rate by the Nigerian central bank might prevent the continued fall in the value of the naira (Text C). [4]
- (f) Using a Lorenz curve diagram, explain what happened to income inequality in Nigeria between 2010 and 2014 (Table 2). [4]
- (g) Using information from the text/data and your knowledge of economics, discuss methods that the Nigerian government might employ to achieve greater economic growth and/or economic development. [15]

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

Text D — Overview of Mexico

- ❶ The Mexican economy continued to expand at an annual rate of 2.5% through most of 2015 and early 2016. However, the growth is expected to be about 2% in 2016. Future growth now fully relies on private consumption, since weak **investment** and export demand are no longer contributing to growth. Increased external competitiveness following a substantial depreciation of the Mexican peso with respect to the US dollar, has not yet led to a boost in demand for exports.
- ❷ The Mexican peso is freely floating and there has been a significant **depreciation** against the US dollar over the past two years. Up to now, the effect of currency depreciation on domestic prices has been limited. Inflation decreased to slightly below the central bank's target of 3%. Additional currency depreciation remains a major concern for the monetary authorities. In response, they have raised the interest rate to 4.25%.
- ❸ Monetary and fiscal policy responses to currency depreciation are likely to have a negative impact on aggregate demand in the short term. Another challenge comes from the oil industry where there has been a decline in the volume of oil production. This is due to falling output from older oil fields and insufficient investments in exploration for new oil fields. This will reduce future annual growth rates by about half a percentage point.
- ❹ On the positive side, several factors are expected to boost private investment and exports, and improve economic growth in the medium term. These include: economic and financial stability; further progress in the implementation of an ambitious structural reform programme; and the increase in external competitiveness following the depreciation of the currency.
- ❺ The Mexican economy continues to face a complex external environment. Persistently low oil prices, an increase in interest rates in the United States, a slowdown in global trade and economic growth, and a number of geopolitical uncertainties may pose challenges to the country's economic and financial stability and growth outlook. Policy priorities should remain focused on sensible economic policies to create the conditions for stronger growth in the medium term.

Text E — The sugar industry in the USA

- ❶ The United States (USA) is the fifth largest sugar producer and fifth largest consumer of sugar in the world. The US sugar industry has enjoyed trade protection since 1789. US protectionist sugar policy consists of three main elements: subsidies through preferential loans, minimum prices, and tariffs and quotas.
- ❷ It has been estimated that in 2012, Americans paid an average of 95.5 cents per kilo for inefficiently produced domestic sugar instead of 58.3 cents per kilo for more efficiently produced world sugar.
- ❸ The US International Trade Commission has ruled that large tariffs on imported Mexican sugar should continue until December 2019, stating that Mexican subsidies on sugar allow Mexican companies to sell sugar in the United States at 40% below market value.

(This question continues on the following page)

(Question 2 continued)

Text F — US production line closes

Mondelēz bakeries closed down production of Oreo biscuits in its Chicago (US) factory, as part of its plan to shift some of its production to Mexico, making about half of the Chicago bakery’s 1200 workers unemployed. The firm said that they could save US\$46 million a year by installing state-of-the-art production lines in Salinas, Mexico, rather than Chicago.

Table 3: Economic data for Mexico

	Previous data	2016 data
GDP (real growth rate, %)	2.2 (2014)	2.1
GDP per capita (US\$ PPP)	18400 (2014)	18900
Unemployment rate (%)	4.4 (2014)	4.4
Inflation rate (%)	2.7 (2015)	2.7
Central bank interest rate (%)	3.42 (2015)	4.3
Current account balance (US\$)	-32.71 billion (2015)	-29.03 billion
Exchange rate (MX\$ per US\$)	15.84 (2014)	18.34
External debt (US\$)	441.6 billion (2015)	484.6 billion
Foreign direct investment (FDI) net inflows (US\$)	26.5 billion (2010)	32.1 billion

Table 4: Development data for Mexico

	2010	2015
Population (million)	118.62	127.02
Human Development Index (World ranking)	0.750 (56)	0.756 (74)
Gini index	0.4813	0.4821

(This question continues on page 9)

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(Question 2 continued)

- (a) (i) Define the term *investment* indicated in bold (Text D, paragraph ❶). [2]
 - (a) (ii) Define the term *depreciation* indicated in bold (Text D, paragraph ❷). [2]
 - (b) (i) Using information from Table 3, calculate the value of one Mexican peso in US dollars for 2014 and 2016. [2]
 - (b) (ii) Draw a demand and supply diagram showing the effect of imposing minimum prices (Text E, paragraph ❶). [3]
 - (c) Using an appropriate diagram, explain the type of unemployment being created in Chicago (Text F). [4]
 - (d) Using an AD/AS diagram, explain the possible effects of currency depreciation on inflation (Text D, paragraph ❷). [4]
 - (e) Using an exchange rate diagram, explain **one** measure that the Mexican government might take to prevent the “substantial depreciation of the Mexican peso” (Text D, paragraph ❶). [4]
 - (f) Using a poverty cycle diagram, explain how the net increase in foreign direct investment (FDI) in Mexico between 2010 and 2015 might lead to an improvement in economic development (Table 3). [4]
 - (g) Using information from the text/data and your knowledge of economics, discuss possible economic outcomes for economic growth and economic development that might arise from Mexico’s current international trade prospects. [15]
-

References:

- Text A** The World Bank, 2015. *The World Bank in Nigeria, overview*. [online] Available at: <<http://www.worldbank.org/en/country/nigeria/overview>> [Accessed January 2017]. SOURCE ADAPTED.
- Text B** Dattaro, L., 2015. *Royal Dutch Shell Agrees to \$83 Million Payout for Nigerian Oil Spills*. Vice News, [online] 7 January 2015. Available at: <<https://news.vice.com/article/royal-dutch-shell-agrees-to-83-million-payout-for-nigerian-oil-spills>>. SOURCE ADAPTED.
- Dey, E., 2015. *Nigeria Set Up a Fund to Clean Up the Niger Delta — but There's Not Much Cash in It*. Vice News, [online] 13 August 2015. Available at: <<https://news.vice.com/article/nigeria-set-up-a-fund-to-clean-up-the-niger-delta-but-theres-not-much-cash-in-it>>. SOURCE ADAPTED.
- Text C** Trading Economics, 2016. Nigeria Hikes Key Rate to 14% in July. *Trading Economics*, [online] 26 July 2016. Available at: <<https://tradingeconomics.com/articles/07262016182204.htm>>. [Accessed January 2017]. SOURCE ADAPTED.
- Table 1** The Central Intelligence Agency, 2016. The World Factbook [online] Available at: <<https://www.cia.gov/library/publications/the-world-factbook/geos/ni.html>>. [Accessed January 2017]. SOURCE ADAPTED.
- Trading Economics, 2016. Nigeria – Economic indicators. *Trading Economics*, [online] August 2016. Available at: <<https://tradingeconomics.com/nigeria/indicators>> [Accessed January 2017]. SOURCE ADAPTED.
- Table 2** The World Bank, 2016. [online] July 2016. Available at: <<http://data.worldbank.org>>. [Accessed January 2017]. SOURCE ADAPTED. REFERENCE REDACTED.
- Text D** The World Bank, 2016. *The World Bank in Mexico, overview*. [online] Available at: <http://www.worldbank.org/en/country/mexico/overview#1>. [Accessed January 2017]. SOURCE ADAPTED.
- Text E** Worstall, T., 2017. *If US Sugar Tariffs Make Americans Poorer Then Donald Trump's Tariffs Will Make Americans What?* Forbes, [online] 18 January 2017. Available at: <<http://www.forbes.com/sites/timworstall/2017/01/18/if-us-sugar-tariffs-make-americans-poorer-then-donald-trumps-tariffs-will-make-americans-what/#86e989b68bab>>. SOURCE ADAPTED.
- McConnaughey, J., 2015. *Group finds Mexico hurt US by dumping subsidized sugar*. The Seattle Times, [online] 20 October 2015. Available at: <<http://www.seattletimes.com/business/group-finds-mexico-hurt-us-by-dumping-subsidized-sugar/>>. SOURCE ADAPTED.
- Brownstein, B., 2016. *Big sugar has a sweet tooth for subsidies*. The Foundation for Economic Education, [online] 3 July 2016. Available at: <<https://fee.org/articles/big-sugar-has-a-sweet-tooth-for-subsidies/>>. SOURCE ADAPTED.
- Text F** Berman, C., 2016. *End of an era, Chicago's last Oreo line shut down Friday*. Chicago Tribune, [online] 8 July 2016. Available at: <<http://www.chicagotribune.com/business/ct-last-chicago-oreo-0709-biz-20160708-story.html>>. SOURCE ADAPTED.
- Table 3** The Central Intelligence Agency, 2017. The World Factbook [online] Available at: <<https://www.cia.gov/library/publications/the-world-factbook/geos/ni.html>>. [Accessed January 2017]. SOURCE ADAPTED.
- Table 4** The World Bank, 2016. [online] July 2016. Available at: <<http://data.worldbank.org>>. [Accessed January 2017]. SOURCE ADAPTED. REFERENCE REDACTED.
- United Nations Development Programme, 2017. *Human Development reports, Mexico*. [online] Available at: <<http://hdr.undp.org/en/countries/profiles/MEX>> [Accessed January 2017]. SOURCE ADAPTED.

Markscheme

Specimen paper

Economics



















Higher level


















Paper 2


This markscheme is **confidential** and for the exclusive use of examiners in this examination session.

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The following are the annotations available to use when marking responses.

Annotation	Explanation
	Attempts Evaluation
	Answers the Question
	Benefit of Doubt
	Clear Knowledge Shown
	Cross — Incorrect Point
	Effective Evaluation
	Good Analysis
	Good Definition
	Good Diagram
	Good Example
	Good Explanation
	Good Use of Text
	Highlight tool
	Incorrect Labelling
	Irrelevant
	Inappropriate Use
	Lacks Depth
	Lacks Logical Structure
L0	Level 0
L1	Level 1
L2	Level 2
L3	Level 3

	Not Answered Question
	No Examples
	No Use of Text
	Num 1 + 1; Split Criteria Mark
	Num 1 + 2; Split Criteria Mark
	Num 2 + 1; Split Criteria Mark
	Num 2 + 2; Split Criteria Mark
	On-page comment text box (for adding specific comments)
	Poor Diagram
	Question mark — Unclear
	Apply to blank pages
	Theory is Clearly Explained
	Theory is Not Clearly Explained
	Tick — Correct Point (colourable)
	Too Vague
	Underline tool
	Unbalanced Response

You **must** make sure you have looked at all pages. Please put the  annotation on any blank page, to indicate that you have seen it.

Use the question-specific markscheme together with the markbands. Award up to the maximum marks as indicated.

1. (a) (i) Define the term *economic growth* indicated in bold (Text A, paragraph ②). [2]

Level	Descriptor	Marks
0	<i>The work does not reach a standard described by the descriptors below.</i>	0
1	<i>Vague definition.</i>	1
	The idea that it is a growing economy (or an increase in GDP).	
2	<i>Accurate definition.</i>	2
	An explanation that it is one of the following: <ul style="list-style-type: none"> • an increase in the value of output adjusted for inflation • an increase in real GDP • an increase in full employment output • growth in production possibilities. 	

(ii) Define the term *market failure* indicated in bold (Text B, paragraph ①). [2]

Level	Descriptor	Marks
0	<i>The work does not reach a standard described by the descriptors below.</i>	0
1	<i>Vague definition.</i>	1
	The idea that a market does not produce at the equilibrium point, or a misallocation of resources, or the existence of externalities.	
2	<i>Accurate definition.</i>	2
	An explanation that it is the failure of a market to produce at the point where any of the following exist: <ul style="list-style-type: none"> • social or community surplus is maximised • marginal social cost = marginal social benefit • Pareto optimality is achieved • allocative efficiency is achieved • the socially optimum level of output is achieved. 	

- (b) (i) Using information from Text A, paragraph ❶, and Table 1, calculate the GDP in US\$ PPP for Nigeria for 2015. [3]

Population = 173 million

GDP per capita = \$6100

Any valid working is sufficient for [1].

GDP = 173 million × 6100 = \$1 055 300 million

An answer of 1 055 300 million OR \$1 055 300 million OR \$1055 billion OR \$1.055 trillion without working is sufficient for [2].

- (ii) Draw a demand and supply diagram to show how the oil prices may have changed in the third quarter of 2014 (Text A, paragraph ❷). [2]

Level	Descriptor	Marks
0	<i>The work does not reach a standard described by the descriptors below.</i>	0
1	<i>There is a correct diagram but incorrect labelling.</i>	1
	For drawing a correct demand and supply diagram, showing a shift of the demand curve for oil to the left OR shift of the supply curve for oil to the right.	
2	<i>There is a correct diagram AND correct labelling.</i>	2
	For drawing a correctly labelled demand and supply diagram, showing a shift of the demand curve for oil to the left OR shift of the supply curve for oil to the right.	

*For a demand and supply diagram, the use of P and Q is sufficient.
A title is not necessary.*

- (c) Using a market failure diagram, explain how the “two oil spills in 2008” could represent a negative externality (Text B, paragraph ①).

[4]

Level	Descriptor	Marks
0	<i>The work does not reach 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 drawing a correctly labelled market failure diagram, showing an MSC curve above the MPC curve and an indicated welfare loss area or externality OR for an explanation that the oil spill would create costs that would not be paid by the oil company and that there would thus be a negative externality of production, since MSC was greater than MSB.	
2	<i>There is a correct diagram AND an accurate written response.</i>	3–4
	For drawing a correctly labelled market failure diagram, showing an MSC curve above the MPC curve and an indicated welfare loss area or externality AND for an explanation that the oil spill would create costs that would not be paid by the oil company and that there would thus be a negative externality of production, since MSC was greater than MSB.	

- (d) Using an AD/AS diagram and information from Text C, explain the likely cause of the increasing inflation rate.

[4]

Level	Descriptor	Marks
0	<i>The work does not reach 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 drawing a correctly labelled AD/AS diagram, showing a shift of the SRAS curve to the left (or a shift of the AD curve to the right) and an increase in the average price level OR for an explanation that increases in the costs of production may have led to increased costs for firms, causing cost-push inflation in the economy (or increased AD in the economy, caused by an increase in [X–M], may have caused demand-pull inflation).	
2	<i>There is a correct diagram AND an accurate written response.</i>	3–4
	For drawing a correctly labelled AD/AS diagram, showing a shift of the SRAS curve to the left (or a shift of the AD curve to the right) and an increase in the average price level AND for an explanation that increases in the costs of production may have led to increased costs for firms, causing cost-push inflation in the economy (or increased AD in the economy, caused by an increase in [X–M], may have caused demand-pull inflation).	

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

For AD/AS, the vertical axis may be Average (General) Price Level, APL or Price level. The horizontal axis may be real output, real national output, real income, real national income, real GDP or real Y. A title is not necessary.

- (e) Using an exchange rate diagram, explain how the increase in the interest rate by the Nigerian central bank might prevent the continued fall in the value of the naira (Text C).

[4]

Level	Descriptor	Marks
0	<i>The work does not reach 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 drawing a correctly labelled exchange rate diagram, showing a shift of the demand curve for the naira to the right and an increase in the exchange rate OR for an explanation that an increase in the interest rate will lead to a greater demand for saving in Nigerian financial institutions, from abroad. This will require naira to do it, leading to an increased demand for the naira and thus an increase in the exchange rate.	
2	<i>There is a correct diagram AND an accurate written response.</i>	3–4
	For drawing a correctly labelled exchange rate diagram, showing a shift of the demand curve for the naira to the right and an increase in the exchange rate AND for an explanation that an increase in the interest rate will lead to a greater demand for saving in Nigerian financial institutions, from abroad. This will require naira to do it, leading to an increased demand for the naira and thus an increase in the exchange rate.	

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

For an exchange rate diagram, the vertical axis may be exchange rate, price of naira in other currencies, or other currency per naira. The horizontal axis should be quantity or quantity of naira. A title is not necessary.

- (f) Using a Lorenz curve diagram, explain what happened to income inequality in Nigeria between 2010 and 2014 (Table 2).

[4]

Level	Descriptor	Marks
0	<i>The work does not reach 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 drawing a correctly labelled Lorenz curve diagram, showing the line of equality and two Lorenz curves, labelled by year OR for an explanation that the increasing value of the Gini coefficient means that income inequality in Nigeria worsened between 2010 and 2014, causing an outward shift in the Lorenz curve.	
2	<i>There is a correct diagram AND an accurate written response.</i>	3–4
	For drawing a correctly labelled Lorenz curve diagram, showing the line of equality and two Lorenz curves, labelled by year AND for an explanation that the increasing value of the Gini coefficient means that income inequality in Nigeria worsened between 2010 and 2014, causing an outward shift in the Lorenz curve.	

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

For the Lorenz curve, the vertical axis should be cumulative percentage of income (or wealth). The horizontal axis should be cumulative percentage of the population. A title is not necessary.

- (g) Using information from the text/data and your knowledge of economics, discuss methods that the Nigerian government might employ to achieve economic growth and/or economic development.

[15]

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

Marks	Level descriptor
0	<ul style="list-style-type: none"> • The work does not reach 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. • The response contains no evidence of synthesis or evaluation. • The response contains no use of text/data.
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 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 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.

Responses *may* include:

- an explanation of the differences between economic growth and economic development
- an explanation of the link between growth and development
- an explanation of the sources of economic growth
- an explanation of the sources of economic development.

Possible supply side policies to improve the quality/quantity of factors of productionInterventionist policies:

- improvements in education (Text A, paragraph ⑤), however:
 - with the falls in public revenue/finances owing to falling oil revenues, this may be difficult to fund (Text A, paragraph ①)
 - there seems to be no recent improvement in literacy rates (Table 2)
 - government debt and external debt are both increasing (Table 2)
- improvements in infrastructure, however, this is harmed by the problems in the North East (Text A, paragraph ④) and also the funding problems relating to falling oil revenues (Text A, paragraph ①)
- reducing interest rates to encourage investment, however, the need to keep the interest rate high to combat the falling value of the naira goes against this (Text C).

Market based policies:

- reducing direct taxes, however, in most developing countries, tax revenue is not a significant revenue for the government and it is likely that Nigeria is no different.

Possible policies to improve the institutional framework

- Improve governance, however:
 - problems with public finances and corruption are likely to hamper this (Text A, paragraph ② and paragraph ⑤)
- improve security (Text A, paragraph ⑤)
- reduce corruption (Text A, paragraph ⑤).

Possible other strategies

- Export-led growth, however:
 - there are problems with over reliance on one product, *ie* oil (Text A, paragraph ②).
- Import-substitution.
- Micro finance.
- Diversification.
- FDI, however:
 - there are possible problems associated with this (Text B).

Any reasonable discussion.

2. (a) (i) Define the term *investment* indicated in bold (Text D, paragraph 1). [2]

Level	Descriptor	Marks
0	<i>The work does not reach a standard described by the descriptors below.</i>	0
1	<i>Vague definition.</i>	1
	The idea that it is buying machinery.	
2	<i>Accurate definition.</i>	2
	An explanation that it is any addition to the capital stock of the economy OR expenditure by firms on capital.	

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

Level	Descriptor	Marks
0	<i>The work does not reach a standard described by the descriptors below.</i>	0
1	<i>Vague definition.</i>	1
	The idea that the exchange rate falls.	
2	<i>Accurate definition.</i>	2
	An explanation that it is a decrease in the value (price) of one currency (in terms of another currency) plus one of the following: <ul style="list-style-type: none"> • in a floating exchange rate system • as a result of free market forces (supply and demand). 	

- (b) (i) Using information from Table 3, calculate the value of one Mexican peso in US dollars for 2014 and 2016. [2]

2014: $1 \text{ peso} = \frac{1}{15.84} = \0.06 **OR** 6.36 cents

2016: $1 \text{ peso} = \frac{1}{18.34} = \0.05 **OR** 5.45 cents

Award [1] for each correct calculation.

- (ii) Draw a demand and supply diagram showing the effect of imposing minimum prices (Text E, paragraph 1). [3]

Level	Descriptor	Marks
0	<i>The work does not reach a standard described by the descriptors below.</i>	0
1	<i>There is a partially correct diagram but incorrect labelling</i>	1
	For drawing an incorrectly labelled demand and supply diagram, showing a minimum price imposed above the equilibrium.	
2	<i>There is a partially correct diagram AND correct labelling.</i>	2
	For drawing a correctly labelled demand and supply diagram, showing a minimum price imposed above the equilibrium OR for drawing an incorrectly labelled demand and supply diagram, showing a minimum price imposed above the equilibrium and with clear indication of excess supply (<i>ie</i> clearly showing the quantities demanded and supplied).	
3	<i>There is a correct diagram AND correct labelling.</i>	3
	For drawing a correctly labelled demand and supply diagram, showing a minimum price imposed above the equilibrium and with clear indication of excess supply (<i>ie</i> clearly showing the quantities demanded and supplied).	

- (c) Using an appropriate diagram, explain the type of unemployment being created in Chicago (Text F).

[4]

Level	Descriptor	Marks
0	<i>The work does not reach 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 drawing a correctly labelled diagram for the labour market in Chicago, showing a fall in demand for labour OR for an explanation that the unemployment in Chicago is an example of structural unemployment, since there has been a change in the structure of the industry.	
2	<i>There is a correct diagram AND an accurate written response.</i>	3–4
	For drawing a correctly labelled diagram for the labour market in Chicago, showing a fall in demand for labour AND for an explanation that the unemployment in Chicago is an example of structural unemployment, since there has been a change in the structure of the biscuit industry.	

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

For a labour market diagram, the vertical axis may be price of labour, or simply wage. The horizontal axis may be number of workers or quantity of workers. A title is not necessary.

Candidates may draw a product diagram showing a decrease in the US supply of biscuits leading to a fall in output which suggests a fall in the demand for labour or a fall in the level of employment. If this is correctly explained and structural unemployment is identified as the type of unemployment, then full marks may be awarded.

(d) Using an AD/AS diagram, explain the possible effects of currency depreciation on inflation (Text D, paragraph ②).

[4]

Level	Descriptor	Marks
0	<i>The work does not reach 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 drawing a correctly labelled AD/AS diagram, showing a shift of the AD curve to the right and an increase in the average price level OR for an explanation that currency depreciation will make exports cheaper and imports more expensive, possibly leading to an increase in [X–M] and so increased AD, leading to inflation.	
2	<i>There is a correct diagram AND an accurate written response.</i>	3–4
	For drawing a correctly labelled AD/AS diagram, showing a shift of the AD curve to the right and an increase in the average price level AND for an explanation that currency depreciation will make exports cheaper and imports more expensive, possibly leading to an increase in [X–M] and so increased AD, leading to inflation.	

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

For AD/AS, the vertical axis may be Average (General) Price Level, APL or Price level. The horizontal axis may be real output, real national output, real income, real national income, real GDP or real Y. A title is not necessary.

Candidates may explain that the increased price of imports from the depreciation may cause a shift of SRAS to the left and cost push inflation. If the diagram is correct and the explanation is full, this should be fully rewarded.

- (e) Using an exchange rate diagram, explain **one** measure that the Mexican government might take to prevent the “substantial depreciation of the Mexican peso” (Text D, paragraph ①).

[4]

Level	Descriptor	Marks
0	<i>The work does not reach 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 drawing a correctly labelled exchange rate diagram, showing a shift of the demand curve for the peso to the right and an increase in the exchange rate OR for an explanation that either: <ul style="list-style-type: none"> the government could raise interest rates, leading to an increased demand for saving from abroad and thus increased demand for the peso, increasing the exchange rate the government could buy pesos, using foreign reserves, thus increasing demand for the peso, increasing the exchange rate. 	
2	<i>There is a correct diagram AND an accurate written response.</i>	3–4
	For drawing a correctly labelled exchange rate diagram, showing a shift of the demand curve for the peso to the right and an increase in the exchange rate AND for an explanation that either: <ul style="list-style-type: none"> the government could raise interest rates, leading to an increased demand for saving from abroad and thus increased demand for the peso, increasing the exchange rate the government could buy pesos, using foreign reserves, thus increasing demand for the peso, increasing the exchange rate. 	

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

For an exchange rate diagram, the vertical axis may be exchange rate, price of peso in other currencies, or other currency per peso. The horizontal axis should be quantity or quantity of peso. A title is not necessary.

- (f) Using a poverty cycle diagram, explain how the net increase in foreign direct investment (FDI) in Mexico between 2010 and 2015 might lead to an improvement in economic development (Table 3).

[4]

Level	Descriptor	Marks
0	<i>The work does not reach 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 drawing an appropriate poverty cycle diagram, including investment OR for an explanation that FDI might fill the saving/investment gap, which could break the poverty cycle and reverse the flow of events, leading to economic development.	
2	<i>There is a correct diagram AND an accurate written response.</i>	3–4
	For drawing an appropriate poverty cycle diagram, including investment AND for an explanation that FDI might fill the saving/investment gap, which could break the poverty cycle and reverse the flow of events, leading to economic development.	

- (g) Using information from the text/data and your knowledge of economics, discuss possible economic outcomes for economic growth and economic development that might arise from Mexico’s current international trade prospects.

[15]

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

Marks	Level descriptor
0	<ul style="list-style-type: none"> • The work does not reach 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. • The response contains no evidence of synthesis or evaluation. • The response contains no use of text/data.
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 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 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.

Responses *may* include:

- an explanation of the differences between economic growth and economic development
- an explanation of the link between growth and development
- an explanation of the sources of economic growth
- an explanation of the sources of economic development.

The current international trade prospects:

- Substantial depreciation of the peso and increased external competitiveness (Text D, paragraph ❶) should lead to an improvement in $[X-M]$ and thus an increase in AD and so economic growth. However:
 - if demand is inelastic or if $PED < 1$, then the $[X-M]$ may not improve and, since oil has inelastic demand, this may apply to Mexico (Text D, paragraph ❸)
 - economic growth may not necessarily lead to economic development.
- Freely floating exchange rate (Text D, paragraph ❷) means that the current account deficits and depreciation of the peso should be self-righting in the long run. However:
 - external factors normally interfere with the theoretical movements of the market.
- Monetary and fiscal policy responses to currency depreciation (Text D, paragraph ❹) mean that there will be contractionary policies that will lead to a reduction in economic growth in the short run.
- Decline in the volume of oil production (Text D, paragraph ❺) will impact exports and thus government revenue, meaning that there may be a reduction in government spending, which could harm both economic growth and also economic development.
- Slowdown in global trade (Text D, paragraph ❻) could harm economic growth and so development.
- Large tariffs and protectionism (Text E, paragraph ❹) may lead to problems with exports and so another reason for a fall in $[X-M]$ and slower economic growth.
- Persistent current account deficit (Table 3) may have an impact on economic growth and development as the government will have to fund the deficit through reserves and borrowing, harming their ability to invest in other areas.
- Increasing external debt (Table 3) suggests a lack of sovereignty and the threats to government spending made above.
- Increasing FDI inflows (Table 3) suggest the lack of sovereignty again and all the advantages and disadvantages that come with FDI.

Any reasonable discussion.

Economics
Higher level
Paper 3

Specimen paper

Candidate session number

1 hour 45 minutes

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Instructions to candidates

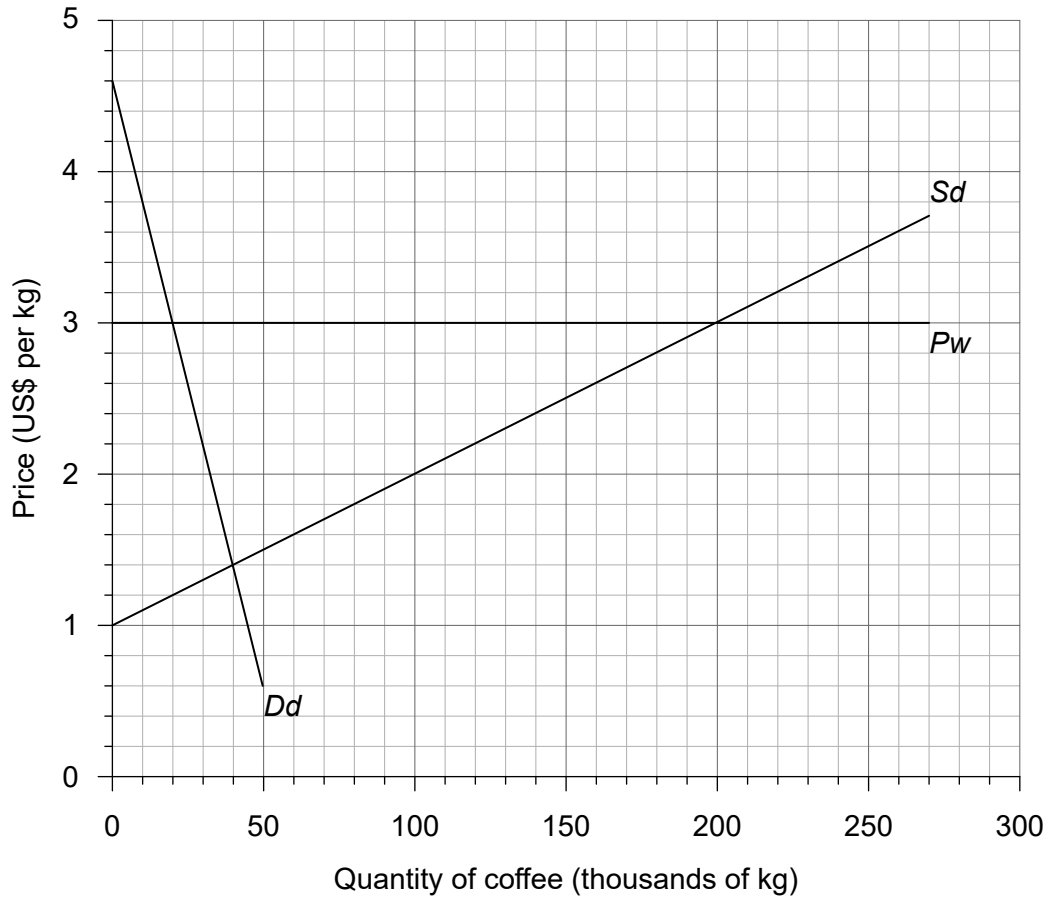
- Write your session number in the boxes above.
- You are permitted access to a calculator for this paper.
- Do not open this examination paper until instructed to do so.
- Answer all the questions.
- Answers must be written within the answer boxes provided.
- Unless otherwise stated in the question, all numerical answers must be given exactly or correct to two decimal places.
- You must show all your working.
- The maximum mark for this examination paper is **[60 marks]**.



Answer **all** the questions. Answers must be written within the answer boxes provided.

1. Country X is a low-income economy situated in Africa. Its main export is coffee, which accounts for 20.2% of its export earnings. **Figure 1** illustrates the market for coffee in Country X. *Dd* and *Sd* represent domestic demand and supply per year, in thousands of kilograms (kg), while *P_w* is the world price in US dollars (US\$) per kg.

Figure 1



- (a) (i) Calculate the value of coffee exports per year from Country X. [2]

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(This question continues on the following page)



(Question 1 continued)

- (ii) Calculate the social/community surplus earned by stakeholders in the coffee market in Country X under conditions of free trade.

[3]

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The government of Country X is concerned about the future of the coffee market for three reasons.

- Several coffee-producing countries have announced plans to increase output.
- Political changes abroad are expected to bring about trade protection.
- Some coffee-producing countries are likely to introduce export subsidies for coffee.

It is believed that the world price of coffee could decrease by as much as US\$0.80 per kg.

- (iii) Calculate how much the revenue earned by coffee producers in Country X would decrease if the world price of coffee falls by US\$0.80 per kg.

[2]

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(This question continues on the following page)



(Question 1 continued)

Table 1 shows selected economic data for Country X (2016 unless stated).

Table 1

	Country X	Comparison (world average)
Gross domestic product (GDP) per capita at purchasing power parity (US\$ PPP)	1717	18 000
% of GDP from agriculture	26.7	3.9
% of labour force working in agriculture	40	19.8
Gini coefficient	0.41	
Current account balance (US\$) (2015)	-2.35 billion	
% of population below poverty line	19.7 (2013)	10.68

(iv) In 2016 the population of Country X was 41.5 million. Using information from Table 1, calculate the GDP (US\$ PPP) for 2016. [1]

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(v) Define the term *current account balance*. [2]

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(This question continues on the following page)



(Question 1 continued)

- (vi) Using an example, explain the importance of presenting “GDP per capita” statistics at purchasing power parity (PPP).

[4]

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The minister of finance for Country X has stated that “one of our problems is that our citizens view coffee as an export crop only, and we do not do enough to develop our domestic market. Indeed, many coffee drinkers in our country buy imported products rather than domestic coffee, and their demand is not price-sensitive”.

- (vii) Assume the price of coffee is US\$2.20 per kg. Using **Figure 1**, calculate the price elasticity of demand (PED) for coffee in Country X if the price were to fall from US\$2.20 per kg to US\$1.40 per kg.

[2]

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- (viii) Using **at least two** items of information provided, explain why the government of Country X should be very concerned at the prospect of a fall in world coffee prices.

[4]

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2. **Table 2** below shows the income tax rates in New Zealand for the 2015–2016 tax year.

Table 2

Taxable income	Tax rate
Up to NZ\$14 000	10.5%
Over NZ\$14 000 and up to NZ\$48 000	17.5%
Over NZ\$48 000 and up to NZ\$70 000	30.0%
Remaining income over NZ\$70 000	33.0%

In New Zealand, Goods and Services Tax (GST) is an indirect tax charged on all goods and services at a standard rate of 15%.

Maya and Takeshi live and work in New Zealand. **Table 3** shows their annual income and tax details. Read the information in **Table 3** carefully and use it to answer the questions which follow.

Table 3

	Maya	Takeshi
Income (NZ\$)	28 000	88 000
Income tax paid (NZ\$)	3 920	
Disposable income (Yd) (NZ\$)	24 080	
% of Yd spent	100	80
GST paid (NZ\$)	3 140.87	
Total tax paid (NZ\$)	7 060.87	
Average rate of tax (%)		

(a) (i) Calculate the annual income tax to be paid by Takeshi. Enter your results in **Table 3**. [2]

.....

(ii) Calculate the GST paid by Takeshi per year. Enter your results in **Table 3**. [2]

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(iii) Calculate the average rate of tax (including both direct and indirect tax) paid by Maya and Takeshi. Enter your results in **Table 3**. [3]

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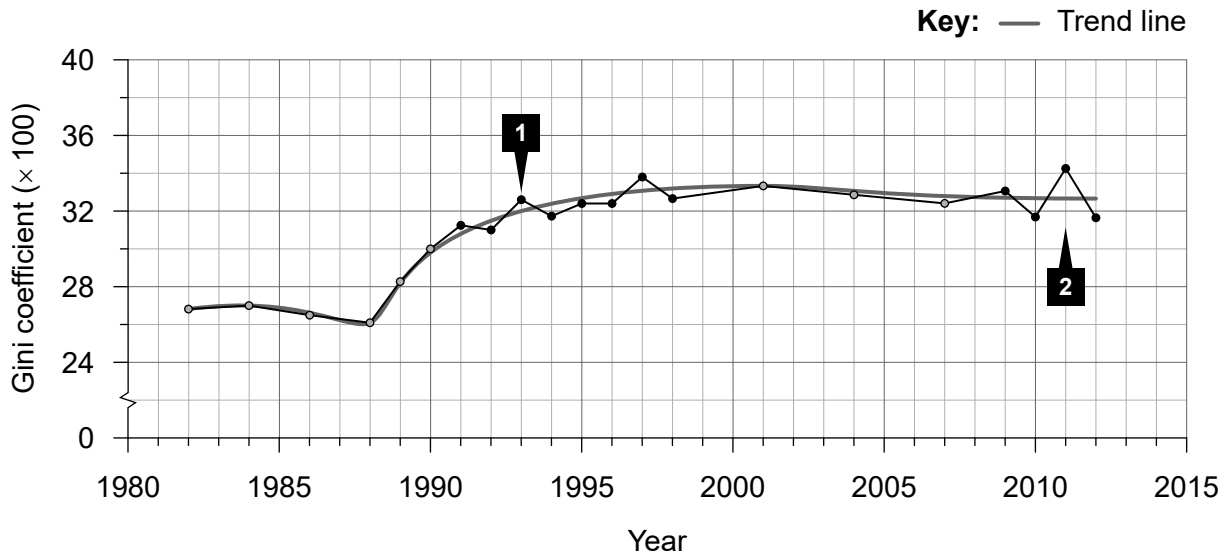


Turn over

(Question 2 continued)

Figure 2 illustrates income inequality in New Zealand: the Gini coefficient.

Figure 2



- 1 The Gini can sometimes fluctuate from one survey to the next. When that happens the trend becomes clear on looking back.
- 2 In recent years there has been some volatility in household incomes, reflecting the ongoing adjustments to the impact of the GFC, Christchurch earthquakes, and the associated economic downturn and recovery. There is no evidence yet of any rising or falling trend in the Gini in recent years.

(iv) Referring to the change in New Zealand's Gini coefficient shown in Figure 2, outline **one** possible reason for this change.

[2]

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(Question 2 continued)

- (v) Explain the likely impact on New Zealand's Gini coefficient if the government increased the rate of GST to 20% in 2017.

[4]

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(Question 2 continued)

The data in **Table 4** and **Table 5** provide information on the prevalence of diabetes and sugar consumption in New Zealand.

It has been argued that a major cause of type 2 diabetes is excessive consumption of sugary drinks and that over 25% of sugar consumed by children in New Zealand comes from sugary drinks.

Table 4 provides information about the prevalence of diabetes by age and ethnicity in 2014.

Table 4

	Age (years)				
	0–24	25–44	45–64	65–74	75+
Māori (%)	0.35	3.7	14.2	27.9	29.6
Pacific peoples (%)	0.36	7.0	29.7	52.5	48.8
Asian (%)	0.14	3.1	13.5	29.7	34.4
European/other (%)	0.44	2.0	6.1	13.6	17.9

Table 5 provides information about weekly soft drink consumption among the youth in New Zealand (2007).

Table 5

	Times per week		
	0	1–3	4+
Māori (%)	20.0	40.9	39.1
Pacific peoples (%)	16.1	35.1	48.8
Asian (%)	31.8	43.7	24.5
European/other (%)	27.5	49.6	22.9

(This question continues on the following page)



(Question 2 continued)

- (vi) Using **Table 4** and **Table 5**, comment on the view that the consumption of sugary drinks contributes to market failure in New Zealand.

[4]

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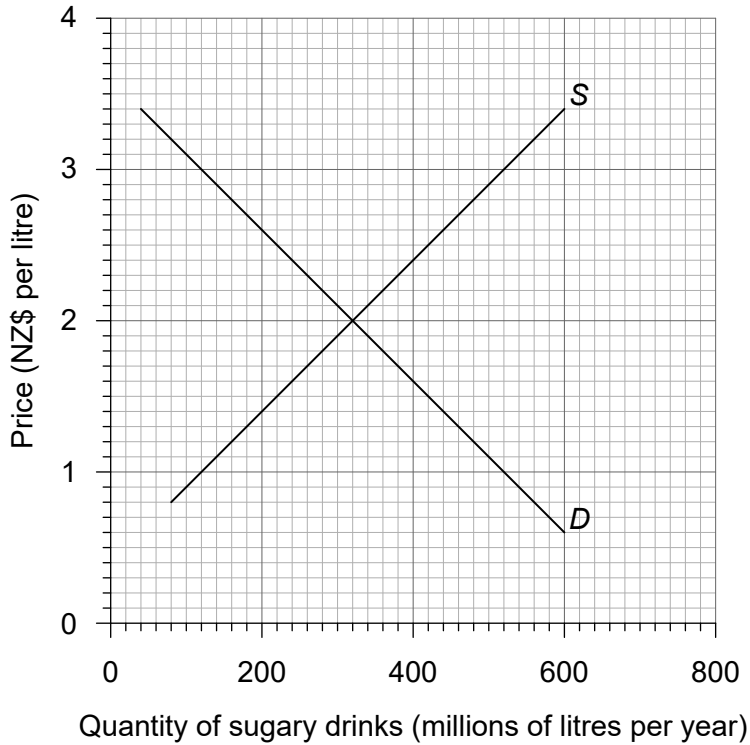
16EP11

Turn over

(Question 2 continued)

Figure 3 illustrates the market for sugary drinks in New Zealand.

Figure 3



Assuming that the consumption of sugary drinks is an example of market failure, it has been estimated that the allocatively efficient level of consumption would be approximately 200 million litres per year.

(vii) Using this information, draw the marginal social benefit (MSB) curve on **Figure 3**. [1]

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(viii) Using your answer to part (vii), calculate the welfare loss to New Zealand resulting from excessive consumption of sugary drinks. [2]

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(This question continues on the following page)



References:

- Figure 1** Observatory of Economic Complexity, 2014. *HS6 rev. 2007 (2008–2017)*. [online] Available at: <<https://atlas.media.mit.edu/en/resources/data/>> [Accessed January 2017]. SOURCE ADAPTED.
- Table 1** The World Bank, 2017. *World Bank Data, 2010, 2013, 2014*. [online] January 2017. Available at: <<https://data.worldbank.org/>> [Accessed January 2017]. SOURCE ADAPTED.
- Table 2** New Zealand Inland Revenue, 2017. *Income tax rates for the 2015–2016 tax year*. [online] Available at: <<https://www.ird.govt.nz/topics/income-tax/tax-codes-and-tax-rates/tax-rates-for-individuals/>> [Accessed January 2017]. SOURCE ADAPTED.
- Figure 2** Stats Chat, 2013. *Inequality in NZ*. [online] 9 December 2013. Available at: <<https://www.statschat.org.nz/2013/12/09/inequality-in-nz/>>. [Accessed January 2017]. SOURCE ADAPTED.
- 2.(vi)** Stuff, 2017. *Sugar content too high in nearly half the drinks Kiwis kids can buy, study finds*. [online] Available at: <<https://www.stuff.co.nz/national/health/88653725/sugar-content-too-high-in-nearly-half-the-drinks-kiwis-kids-can-buy-study-finds>>, [Accessed January 2017]. SOURCE ADAPTED.
- Table 4** New Zealand Government, 2017. *NZ Social Indicators: Obesity*. [online] Available at: <http://www.stats.govt.nz/browse_for_stats/snapshots-of-nz/nz-social-indicators/Home/Health/obesity.aspx> [Accessed January 2017]. SOURCE ADAPTED.
- Table 5** Sundborn G., Utter J., Teevale T., Metcalf P., Jackson R. *Carbonated beverages consumption among New Zealand youth and associations with BMI and waist circumference*. Public Health Dialogue March 2014. 20:1 [online] Available at: <<https://www.fizz.org.nz/pdf/research/13%20Carbonated%20Beverages%20Consumption%20among%20New%20Zealand%20Youth%20and%20Associations%20with%20BMI%20and%20Waist%20Circumference.pdf>> [Accessed January 2017]. SOURCE ADAPTED.



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will not be marked.



16EP15

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16EP16

Markscheme

Specimen paper

Economics














Higher level








Paper 3









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The following are the annotations available to use when marking responses.

Annotation	Explanation
AEr	Arithmetic error
	Benefit of Doubt
	Cross — Incorrect Point
	Does not Follow
	Error Carried Forward
	Good Analysis
	Good Definition
	Good Diagram
	Good Explanation
GP	Good point
	Highlight tool
	Incorrect Labelling
	Irrelevant
L0	Level 0
L1	Level 1
L2	Level 2
N0	No working shown — Awards 0 marks
N1	No working shown — Awards 1 mark
	Not Answered Question
	Not Enough

[0+1]	Num 0 + 1 — Awards 1 mark
[1+0]	Num 1 + 0 — Awards 1 mark
[0+2]	Num 0 + 2 — Awards 2 marks
[2+0]	Num 2 + 0 — Awards 2 marks
1+1	Num 1 + 1 — Awards 2 marks
1+2	Num 1 + 2 — Awards 3 marks
2+1	Num 2 + 1 — Awards 3 marks
2+2	Num 2 + 2 — Awards 4 marks
	Num 0 — Awards 0 marks
NW	No Working shown
OFR	Own Figure Rule
	On-page comment text box (for adding specific comments)
	Poor Diagram
	Poorly Expressed
	Question mark — Unclear
	Rounding Error
	Repetition
SEEN	Seen — Apply to blank pages
TCE	Theory is Clearly Explained
TNCE	Theory is Not Clearly Explained

	Tick 1 — Awards 1 marks
	Tick 2 — Awards 2 marks
	Tick 3 — Awards 3 marks
	Tick 4 — Awards 4 marks
	Tick — Correct Point (colourable)
	Too Vague
	Underline tool
	Unbalanced Response

You **must** make sure you have looked at all pages. Please put the **SEEN** annotation on any blank page, to indicate that you have seen it.

Notes for examiners:

- 1. 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.**
- 2. Alternative approaches may be taken in responses to the [4] questions that use A02 command terms. If this is the case and the alternative approaches are valid, then full credit should be given.**
- 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 question (not per part) for each type of error.**

1. (a) (i) Calculate the value of coffee exports per year from Country X. [2]

$$200 - 20 = 180 \text{ OR } 180\,000$$

Any valid working (including recognition of US\$3 as the export price) is sufficient for [1].

$$180\,000 \times 3 = \text{US}\$540\,000$$

An answer of US\$540 000 OR 540 000 without working is sufficient for [1].

- (ii) Calculate the social/community surplus earned by stakeholders in the coffee market in Country X under conditions of free trade. [3]

$$\text{Consumer surplus} = 0.5 \times 1.6 \times 20\,000 = 16\,000$$

$$\text{Producer surplus} = 0.5 \times 2 \times 200\,000 = 200\,000$$

Any valid working is sufficient for [1].

$$\text{Social/community surplus} = 16\,000 + 200\,000$$

$$= \text{US}\$216\,000$$

An answer of US\$216 000 OR 216 000 without working is sufficient for [2].

OFR applies for adding consumer surplus to producer surplus.

- (iii) Calculate how much the revenue earned by coffee producers in Country X would decrease if the world price of coffee falls by US\$0.80 per kg. [2]

Initial revenue = $3 \times 200\,000 = 600\,000$

Final revenue = $2.20 \times 120\,000 = 264\,000$

*Award [1] if the initial **OR** final revenue is correct.*

Decrease in revenue = $600\,000 - 264\,000 = \text{US}\$336\,000$

*An answer of US\$336 000 **OR** 336 000 without working is sufficient for [1].*

- (iv) In 2016 the population of Country X was 41.5 million. Using information from **Table 1**, calculate the GDP (US\$ PPP) for 2016. [1]

$1717 \times 41.5 \text{ m}$

= US\$71 255.5 million

*An answer of 71 255.5 **OR** 71 255.5 million **OR** 71.255 billion **OR** 71.26 billion **OR** 71 255 500 000 without working is sufficient for [1].*

- (v) Define the term *current account balance*. [2]

Level	Descriptor	Marks
0	<i>The work does not reach a standard described by the descriptors below.</i>	0
1	<i>Vague definition.</i>	1
	The idea that it is exports minus imports OR the idea that it is a measure of money coming into, and going out of, a country from international trade.	
2	<i>Accurate definition.</i>	2
	The idea that it is the net inflow of funds from trade in goods and services plus other income flows (and transfers).	

- (vi) Using an example, explain the importance of presenting “GDP per capita” statistics at purchasing power parity (PPP).

[4]

Level	Descriptor	Marks
0	<i>The work does not reach a standard described by the descriptors below.</i>	0
1	<i>The written response is limited.</i>	1–2
	For the idea that the purchasing power of GDP per capita (measured in, for example, US\$) is not comparable between countries due to differences in the general price level.	
2	<i>The written response is accurate.</i>	3–4
	For an explanation that purchasing power of GDP per capita (measured in, for example, US\$) is not comparable between countries due to differences in the general price level, and that adjusting for purchasing power parity allows a realistic comparison of the real value of GDP per capita AND for an example, such as: if annual GDP per capita is \$5000 in Country A and \$10 000 in Country B, while the cost of living in Country B is twice that in Country A, then GDP per capita at PPP would be equal between the countries.	

If a relevant example is not included, a maximum of [3] may be awarded.

- (vii) Assume the price of coffee is US\$2.20 per kg. Using **Figure 1**, calculate the price elasticity of demand (PED) for coffee in Country X if the price were to fall from US\$2.20 per kg to US\$1.40 per kg.

[2]

$$PED = \frac{33.33\%}{-36.36\%}$$

*Any valid working (either the % change in P or Qd) is sufficient for [1].
Figures may be rounded.*

$$= -0.92 \text{ OR } 0.92$$

An answer of 0.92 without working is sufficient for [1].

(viii) Using **at least two** items of information provide, explain why the government of Country X should be very concerned at the prospect of a fall in world coffee prices.

[4]

Level	Descriptor	Marks
0	<i>The work does not reach a standard described by the descriptors below.</i>	0
1	<i>The written response is limited.</i>	1–2
	For identifying two reasons why the government of Country X should be very concerned at the prospect of a fall in world coffee prices. Award [1] for each valid reason.	
2	<i>The written response is accurate.</i>	3–4
	For explaining two reasons why the government of Country X should be very concerned at the prospect of a fall in world coffee prices. A response which does not use at least two items of information may be awarded a maximum of [3] .	

Answers may include:

- Coffee comprises 20.2 % of export earnings. If the price of coffee falls then export earnings will decrease.
- The current account balance is in deficit (–US\$2.35 billion). The deficit would increase.
- Agriculture accounts for 26.7 % of GDP, 40 % of the labour force works in agriculture. A fall in the price of coffee will affect rural workers significantly.
- The level of poverty is relatively high (19.7 %) while GDP/capita is less than 10 % of the world average. Inequality is significant (Gini coefficient = 0.41). A fall in the price of coffee would be likely to increase poverty, reduce GDP/capita and increase inequality.

Any valid reason explained.

- (b) Using the data provided and your knowledge of economics, recommend a policy which could be introduced by the government of Country X in response to the expected fall in the world price of coffee.

[10]

Possible policies may include (but are not restricted to):

- Support for the domestic coffee industry eg subsidies, import tariffs.
- Policies to promote domestic consumption.
- Import tariffs on foreign coffee.
- Policies to encourage diversification.
- Policies to encourage the domestic processing of coffee.
- Investment in infrastructure in order to support the coffee industry.
- The establishment/development of a regional trading bloc.
- A combination of policies.
- Any other valid policy.

Assessment Criteria

Recommend—present an advisable course of action with appropriate supporting evidence/reason in relation to a given situation, problem or issue.

Marks	Level descriptor
0	<ul style="list-style-type: none"> • The work does not reach a standard described by the descriptors below.
1–2	<ul style="list-style-type: none"> • The response identifies a policy. • The response uses no economic theory to support the recommendation. • Economic terms are stated but are not relevant. • The response contains no use of text/data to support the recommendation. • The response contains no evidence of synthesis or evaluation.
3–4	<ul style="list-style-type: none"> • The response identifies an appropriate policy. • The response uses limited economic theory to support the recommendation in a superficial manner. • Some relevant economic terms are included. • The response contains no use of relevant text/data to support the recommendation. • The response contains evidence of superficial synthesis or evaluation.
5–6	<ul style="list-style-type: none"> • The response identifies and explains an appropriate policy. • The response uses relevant economic theory to partially support the recommendation. • Some relevant economic terms are used appropriately. • The response includes some relevant information from the text/data to support the recommendation. • The response contains evidence of appropriate synthesis or evaluation but lacks balance.
7–8	<ul style="list-style-type: none"> • The response identifies and fully explains an appropriate policy. • The response uses relevant economic theory to support the recommendation. • Relevant economic terms are used mostly appropriately. • The use of information from the text/data is generally appropriate, relevant and applied correctly to support the recommendation. • The response contains evidence of appropriate synthesis or evaluation that is mostly balanced.
9–10	<ul style="list-style-type: none"> • The response identifies and fully explains an appropriate policy. • The response uses relevant economic theory effectively to support the recommendation. • Relevant economic terms are used appropriately throughout the response. • The use of information from the text/data is appropriate, relevant and supports the analysis/evaluation effectively. • The response contains evidence of effective and balanced synthesis or evaluation.

2. (a) (i) Calculate the annual income tax to be paid by Takeshi. Enter your results in **Table 3**. [2]

$$14\,000 \times 10.5\% = 1470$$

$$34\,000 \times 17.5\% = 5950$$

$$22\,000 \times 30\% = 6600$$

$$18\,000 \times 33\% = 5940$$

Any valid working is sufficient for [1].

$$= \$19\,960$$

An answer of \$19 960 OR 19 960 without working is sufficient for [1].

- (ii) Calculate the GST paid by Takeshi per year. Enter your results in **Table 3**. [2]

$$\text{Takeshi spends } 0.8 \times 68\,040 = 54\,432$$

Any valid working should be rewarded with [1].

$$\text{GST paid} = 54\,432 \times \left(\frac{0.15}{1.15} \right) = \$7\,099.83$$

An answer of 7 099.83 without workings is sufficient for [1].

OFR applies if the response to part (a) is incorrect.

- (iii) Calculate the average rate of tax (including both direct and indirect tax) paid by Maya and Takeshi. Enter your results in **Table 3**. [2]

$$\text{Maya: } \left(\frac{7\,060.87}{28\,000} \right) \times 100 = 25.22\%$$

$$\text{Takeshi: } \left[\frac{(19\,960 + 7\,099.83)}{88\,000} \right] \times 100$$

Any valid working is sufficient for [1].

$$= 30.75\%$$

An answer of 30.75 % without workings is sufficient for [1].

OFR applies for Takeshi.

- (iv) Referring to the change in New Zealand’s Gini coefficient shown in **Figure 2**, outline **one** possible reason for this change.

[2]

Level	Descriptor	Marks
0	<i>The work does not reach a standard described by the descriptors below.</i>	0
1	<i>The written response is limited.</i>	1
	For example: the tax system.	
2	<i>The written response is accurate.</i>	2
	For example: the tax system has become less progressive.	

Possible reasons may include:

- The tax system has become less progressive.
- The rate of indirect taxation has increased.
- Market orientated supply-side policies have been introduced, such as labour market reforms.
- Welfare payments have been cut.
- The bargaining power of organized labour has been reduced.
- Any other valid reason.

- (v) Explain the likely impact on New Zealand’s Gini coefficient if the government increased the rate of GST to 20 % in 2017.

[4]

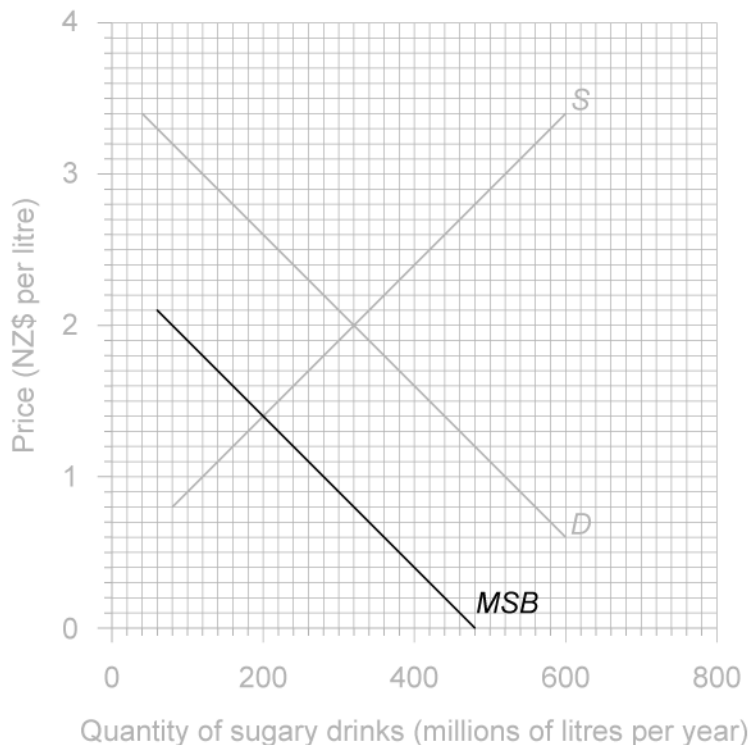
Level	Descriptor	Marks
0	<i>The work does not reach a standard described by the descriptors below.</i>	0
1	<i>The written response is limited.</i>	1–2
	For the idea that an increase in the rate of GST will make the system more regressive, as GST paid on any good/service constitutes a smaller percentage of income for those on higher incomes OR that this will make the distribution of income more unequal and therefore increase the Gini coefficient.	
2	<i>The written response is accurate.</i>	3–4
	For an explanation that an increase in the rate of GST will make the system more regressive, as GST paid on any good/service constitutes a smaller percentage of income for those on higher incomes AND that this will make the distribution of income more unequal and therefore increase the Gini coefficient.	

- (vi) Using **Table 4** and **Table 5**, comment on the view that the consumption of sugary drinks contributes to market failure in New Zealand. **[4]**

Level	Descriptor	Marks
0	<i>The work does not reach a standard described by the descriptors below.</i>	0
1	<i>The written response is limited.</i>	1–2
	For the idea that the data suggest that the consumption of sugar can lead to diabetes, a negative externality of consumption, causing market failure.	
2	<i>The written response is accurate.</i>	3–4
	For an explanation that the data suggest that the consumption of sugar can lead to diabetes, a negative externality of consumption, causing market failure. Pacific people, with high prevalence of diabetes appear to consume relatively high quantities of sugary drinks when they are young. This indicates that there is a link between sugar consumption and diabetes, although the causation is not necessarily proven.	

A response which does not refer directly to the data or which does not challenge the issue of causality may be awarded a maximum of [3].

- (vii) Using this information, draw the marginal social benefit (MSB) curve on **Figure 3**. **[1]**



Award [1] for a curve, labelled MSB, which intersects the supply curve at 200 million litres.

- (viii) Using your answer to part (vii), calculate the welfare loss to New Zealand resulting from excessive consumption of sugary drinks.

[2]

$$0.5 \times 120 \times 1.2$$

Any valid working is sufficient for [1].

$$= \$72 \text{ million}$$

An answer of 72 million without workings is sufficient for [1].

OFR applies if the curve for part (vii) is placed incorrectly.

- (b) Using the data provided and your knowledge of economics, recommend a policy which the New Zealand government could introduce to address the over-consumption of sugary drinks.

[10]

Possible policies may include (but are not restricted to):

- An indirect tax on sugar or products containing high levels of sugar.
- Legislation to regulate the sugar content in food/drinks.
- Legislation to restrict the availability of products which are high in sugar (eg in schools/shops near to schools).
- Subsidies on “healthier” food products.
- Education/advertising aimed at decreasing the demand for products high in sugar.
- Behavioural economic policies, such as Nudge theory, choice architecture.
- A combination of policies.
- Any other valid policy.

Assessment Criteria

Recommend—present an advisable course of action with appropriate supporting evidence/reason in relation to a given situation, problem or issue.

Marks	Level descriptor
0	<ul style="list-style-type: none"> • The work does not reach a standard described by the descriptors below.
1–2	<ul style="list-style-type: none"> • The response identifies a policy. • The response uses no economic theory to support the recommendation. • Economic terms are stated but are not relevant. • The response contains no use of text/data to support the recommendation. • The response contains no evidence of synthesis or evaluation.
3–4	<ul style="list-style-type: none"> • The response identifies an appropriate policy. • The response uses limited economic theory to support the recommendation in a superficial manner. • Some relevant economic terms are included. • The response contains no use of relevant text/data to support the recommendation. • The response contains evidence of superficial synthesis or evaluation.
5–6	<ul style="list-style-type: none"> • The response identifies and explains an appropriate policy. • The response uses relevant economic theory to partially support the recommendation. • Some relevant economic terms are used appropriately. • The response includes some relevant information from the text/data to support the recommendation. • The response contains evidence of appropriate synthesis or evaluation but lacks balance.
7–8	<ul style="list-style-type: none"> • The response identifies and fully explains an appropriate policy. • The response uses relevant economic theory to support the recommendation. • Relevant economic terms are used mostly appropriately. • The use of information from the text/data is generally appropriate, relevant and applied correctly to support the recommendation. • The response contains evidence of appropriate synthesis or evaluation that is mostly balanced.
9–10	<ul style="list-style-type: none"> • The response identifies and fully explains an appropriate policy. • The response uses relevant economic theory effectively to support the recommendation. • Relevant economic terms are used appropriately throughout the response. • The use of information from the text/data is appropriate, relevant and supports the analysis/evaluation effectively. • The response contains evidence of effective and balanced synthesis or evaluation.

Economics
Standard level
Paper 1

Specimen paper

1 hour 15 minutes

Instructions to candidates

- Do not turn over this examination paper until instructed to do so.
- You are not permitted access to a calculator for this paper.
- Answer one question.
- Use fully labelled diagrams where appropriate.
- The maximum mark for this examination paper is **[25 marks]**.

Answer **one** question.

1. (a) Explain **two** reasons why a government might set a price ceiling (maximum price) on a good. [10]
 - (b) Using real-world examples, discuss the consequences of a price ceiling on stakeholders. [15]
 2. (a) Explain **two** possible causes of deflation. [10]
 - (b) Using real-world examples, evaluate the effectiveness of monetary policy to achieve low inflation. [15]
 3. (a) Explain **two** factors which influence the value of a currency in a floating exchange rate system. [10]
 - (b) Using real-world examples, discuss the consequences of a fall in a country's exchange rate. [15]
-

Markscheme

Specimen paper

Economics


















Standard level















Paper 1

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The following are the annotations available to use when marking responses.

Annotation	Explanation
	Attempts Evaluation
	Answers the Question
	Benefit of Doubt
	Clear Knowledge Shown
	Cross — Incorrect Point
	Effective Evaluation
	Good Analysis
	Good Definition
	Good Diagram
	Good Example
	Good Explanation
	Highlight tool
	Incorrect Labelling
	Irrelevant
	Inappropriate Use
	Lacks Depth
	Lacks Logical Structure
L0	Level 0
L1	Level 1
L2	Level 2
L3	Level 3
L4	Level 4

	Not Answered Question
	No Definition
	No Examples
	On-page comment text box (for adding specific comments)
	Poor Diagram
	Poorly Expressed
	Question mark — Unclear
	Apply to blank pages
	Theory is Clearly Explained
	Theory is Not Clearly Explained
	Tick — Correct Point (colourable)
	Too Vague
	Underline tool
	Unbalanced Response

You **must** make sure you have looked at all pages. Please put the **SEEN** annotation on any blank page, to indicate that you have seen it.

Use the question-specific markscheme together with the markbands. Award up to the maximum marks as indicated.

1. (a) Explain **two** reasons why a government might set a price ceiling (maximum price) on a good.

[10]

Answers **may** include:

- Definition: price ceiling (maximum price).
- Explanation: of the government’s motives for introducing a price ceiling, such as equity and accessibility.
- Diagram: showing price ceiling (maximum price).

Assessment Criteria

Marks	Level descriptor
0	<ul style="list-style-type: none"> • The work does not reach a standard described by the descriptors below.
1–2	<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.
3–4	<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.
5–6	<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.
7–8	<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 mostly appropriately. • Where appropriate, relevant diagram(s) are included and explained.
9–10	<ul style="list-style-type: none"> • The specific demands of the question are 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.

- (b) Using real-world examples, discuss the consequences of a price ceiling on stakeholders.

[15]

Answers may include:

- Definition: price ceiling, stakeholders.
- Explanation: impact of a price ceiling on stakeholders:
 - Consumers: shortages, lower prices, parallel/unofficial markets and the possible means to resolve a shortage (queues), possible reduced quality of goods, benefits such as access for low income families especially during inflation, equity.
 - Producers: discouragement of suppliers to produce more because they cannot set prices and consequent reduction of availability, impact on signalling and incentive functions of price.
 - Government: need for intervention to overcome shortages (rationing).
- Diagram: to show price ceiling (if not given in part (a)).
- Synthesis (discuss): a considered and balanced review that includes a range of consequences for different stakeholders.
- Examples should include real-world illustrations such as rents, fuel, food and their consequences.

N.B. It should be noted that definitions, theory and examples that have already been given in part (a), and then referred to in part (b), should be rewarded.

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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 superficial synthesis or evaluation. • A relevant real-world example(s) is identified.
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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 mostly appropriately. • Where appropriate, relevant diagram(s) are included and explained. • The response contains evidence of appropriate synthesis or evaluation that is mostly balanced. • A relevant real-world example(s) is identified and developed in the context of the question.
13–15	<ul style="list-style-type: none"> • The specific demands of the question are 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. • A relevant real-world example(s) is identified and fully developed to support the argument.

2. (a) Explain **two** possible causes of deflation. **[10]**

Answers may include:

- Definition: deflation.
- Explanation: any determinant of AD that could shift it to the left, eg falling consumer or business confidence, falling consumption, falling investment, falling government spending, or any determinant that shifts AS to the right, eg falling costs of raw materials or labour, increased productivity, rising exchange rate.
- Diagram: AD/AS diagram to show falling AD or increasing AS in such a way that the average price level falls.

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- (b) Using real-world examples, evaluate the effectiveness of monetary policy to achieve low inflation.

[15]

Answers may include:

- Definition: inflation, monetary policy.
- Explanation: that it is incremental, easily changed, flexible, fast to implement, does not burden the government's budget. That there are limitations: it is less effective when business/consumer confidence is high; effectiveness may depend on the type of inflation.
- Diagram: AD/AS diagram to illustrate contractionary monetary policy.
- Synthesis (evaluate): strengths and limitations of monetary policy in achieving low inflation. Fiscal policy might be considered as an alternative, but the emphasis of the response should be on monetary policy.
- Examples: real-world examples of where governments have attempted to lower inflation using monetary policy.

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3. (a) Explain **two** factors which influence the value of a currency in a floating exchange rate system.

[10]

Answers *may* include:

- Definition: floating exchange system.
- Explanation: an explanation of how the value of a floating exchange rate is determined, including demand for exports and imports, speculation, relative interest rates, remittances, portfolio flows, relative inflation rates, foreign direct investment.
- Diagram: demand and supply diagram to show determination of an exchange rate.

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- (b) Using real-world examples, discuss the consequences of a fall in a country's exchange rate.

[15]

Answers may include:

- Definition: exchange rate.
- Explanation: of consequences such as changes in the price level, economic growth, employment, quantities of imports and exports depending on elasticities, effects on competitiveness and changes in government policy.
- Diagram: supply and demand diagram to show reduced demand or increased supply of a currency.
- Synthesis (discuss): the magnitude of the reduction in the exchange rate, whether the economy is impacted positively or negatively in terms of growth, unemployment and inflation, effects on different sectors such as tourism and agriculture.
- Examples: real-world examples of countries which have experienced the consequences of a reduced exchange rate.

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