

# Markscheme

## November 2018

## **Economics**

## **Higher level**

## Paper 2

20 pages



This markscheme is the property of the International Baccalaureate and must **not** be reproduced or distributed to any other person without the authorization of the IB Global Centre, Cardiff.

-2-

## Use the paper-specific markscheme together with the mark bands. Award up to the maximum marks as indicated.

#### Section A

**1.** (a) (i) Define the term *monetary union* indicated in bold in the text (paragraph **0**).

[2]

Level		Marks
0	The work does not meet a standard described by the descriptors below.	0
1	Vague definition.	1
	The idea that it is a type of economic integration.	
2	Accurate definition.	2
	<ul> <li>Where countries share a common currency plus <b>one</b> of the following:</li> <li>member of a common market</li> <li>have a common central bank.</li> </ul>	

(ii) Define the term *comparative advantage* indicated in bold in the text (paragraph **9**). [2]

Level		Marks
0	The work does not meet a standard described by the descriptors	0
	below.	
1	Vague definition.	1
	The idea that one country can produce more efficiently than	
	another country.	
2	Accurate definition.	2
	An explanation that it is when a country can produce a product	
	at a lower opportunity cost than another country.	

(b) Explain why "deteriorating terms of trade have resulted in a worsening of the current account" in South Sudan (paragraph **④**).

[4]

- definition/explanation of terms of trade
- fall in the price of oil leads to a worsening of the terms of trade in South Sudan
- demand for oil is price inelastic
- thus a fall in the terms of trade leads to a fall in export revenue resulting in a worsening on the current account on the balance of payments.

Level		Marks
0	The work does not meet a standard described by the descriptors	0
	below.	
1	Vague explanation.	1–2
	Award [1] for one of the points above.	
	Award <b>[2]</b> for <b>two</b> of the points above.	
2	Accurate explanation.	3–4
	Award <b>[3]</b> for <b>three</b> of the points above.	
	Award <b>[4]</b> for all of the <b>four</b> points above.	

(c) Using a cost diagram, explain how membership in the common market may allow producers in South Sudan to gain economies of scale (paragraph **6**).

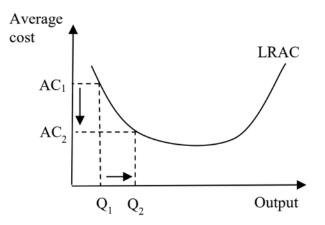
-4-

F / 1	
141	

Level		Marks
0	The work does not meet a standard described by the descriptors below.	0
1	There is a correct diagram <b>OR</b> an accurate written response.	1–2
	For drawing a cost diagram showing a LRAC with two points indicating a fall in average costs at a higher level of output. <b>OR</b> For an explanation that as South Sudan has access to a larger market, it will allow its producers to operate at a higher level of output resulting in economies of scale and a fall in LRAC/AC.	
2	There is a correct diagram <b>AND</b> an accurate written response.	3–4
	For drawing a cost diagram showing a LRAC with two points indicating a fall in average costs at a higher level of output. <i>AND</i> For an explanation that as South Sudan has access to a larger	
	market, it will allow its producers to operate at a higher level of output resulting in economies of scale and a fall in LRAC/AC.	

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

For a cost diagram, the vertical axis may be labelled Cost (C) or Average cost (AC) or Long run average cost (LRAC). The horizontal axis may be labelled Quantity (Q) or Output. A title is not necessary.



(d) Evaluate the likely impact on South Sudan of its membership of the EAC common market.

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

Do not award beyond Level 2 if the answer does not contain reference to the information provided.

Level		Marks
0	The work does not meet a standard described by the descriptors below.	0
1	Few relevant concepts are recognized.	1–2
	There is basic knowledge/understanding.	
2	Relevant concepts are recognized and developed in reasonable depth.	3–5
	There is clear knowledge/understanding.	
	There is some attempt at application/analysis.	
3	Relevant concepts are recognized and developed in reasonable depth.	6–8
	There is clear knowledge/understanding.	
	There is effective application/analysis.	
	There is synthesis/evaluation, supported by appropriate theory and evidence.	

#### Command term

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

#### Answers may include:

- definition of economic integration
- definition of common market.

#### Advantages/opportunities of economic integration:

- larger export markets, may allow South Sudan producers to gain economies of scale, as noted in part (c). In the market for rice, this may allow South Sudan to develop a comparative advantage (paragraph ⑤)
- larger market may encourage diversification, and reduce South Sudan's reliance on oil
- further stimulus for foreign direct investment as foreign companies will benefit from the larger market size; however, this may be limited by the low levels of human capital and high production costs (paragraph ③)
- opportunities to South Sudan workers who, with free movement of labour, may work in other East African countries
- advantages to South Sudan companies who, with free movement of capital, may invest in other East African countries
- cost of imported factors of production may decrease
- South Sudan can gain from the rapidly growing trade within the trading bloc (graph)
- greater political stability and cooperation, (paragraph ④) may also result in higher levels of investment, leading to economic growth
- trade creation will benefit producers who can import inputs without tariffs (paragraph ②)

- greater efficiency as domestic producers will have to compete with lower priced imports from other member countries
- consumers may have access to less expensive imported goods and services. However, this might be limited if trade diversion takes place and the new common external tariff makes some imported products more expensive
- bargaining power of South Sudan in multilateral trade negotiations can improve if it is part of the larger trading bloc
- economic integration can result in greater peace.

#### Disadvantages/challenges of economic integration:

- trade diversion (paragraph ♥)
- the role of the WTO might be undermined, since it allows East African Countries to look inwards
- trade becomes more complicated with a series of intra-trading bloc agreements
- unemployment, as less efficient South Sudan companies (with higher labour costs, paragraph ☉), can't compete with lower priced imports from other member countries
- any potential new trade agreements with non-members may be restricted by common external tariffs
- the larger the group the more difficult it is to come to agreements.

Any reasonable evaluation.

#### **2.** (a) (i) Define the term *inflation* indicated in bold in the text (paragraph **③**).

Level		Marks
0	The work does not meet a standard described by the descriptors below.	0
1	Vague definition.	1
	The idea that it is an increase in prices in the economy.	
2	Accurate definition.	2
	An explanation that it is a sustained increase in the price level in the economy. For <b>[2]</b> there must be some indication of time <i>eg</i> sustained, persistent, continuous.	

(ii) Define the term *devaluation* indicated in bold in the text (paragraph ♥).

[2]

[4]

[2]

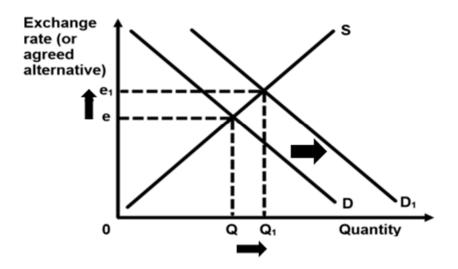
Level		Marks
0	The work does not meet a standard described by the descriptors	0
	below.	
1	Vague definition.	1
	The idea that a currency is worth less <b>OR</b> the idea that the	
	exchange rate falls.	
2	Accurate definition.	2
	An explanation that it is a decrease in the value (price) of one currency (in terms of another currency) plus <b>one</b> of the following • in a fixed exchange rate system	
	as a result of government or central bank intervention.	

## (b) Using an exchange rate diagram, explain how the central bank could "use its foreign reserves" to restore the value of the naira (paragraph ⑤).

Level		Marks
0	The work does not meet a standard described by the descriptors	0
	below.	
1	There is a correct diagram <b>OR</b> an accurate written response.	1–2
	An exchange rate diagram showing a shift in the demand curve to the right and an increase in the value of the naira <i>OR</i>	
	An explanation that the central bank (uses its reserves to) buy the naira, increasing the demand for the currency, thus bringing about an appreciation of its currency to restore its minimum (initial/original) value.	
2	There is a correct diagram <b>and</b> an accurate written response.	3–4
	An exchange rate diagram showing a shift in the demand curve to the right and an increase in the value of the naira <b>AND</b> An explanation that the central bank (uses its reserves to) buy the naira, increasing the demand for the currency, thus bringing	
	about an appreciation of its currency to restore its minimum (initial/original) value.	

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 dollars", or "US dollars per naira", or "USD/naira". The horizontal axis should be "quantity" or "quantity of naira". A title is not necessary.



(c) Using an AD/AS diagram, explain how a decision to "tighten monetary policy" might be harmful to the economy (paragraph ♥).

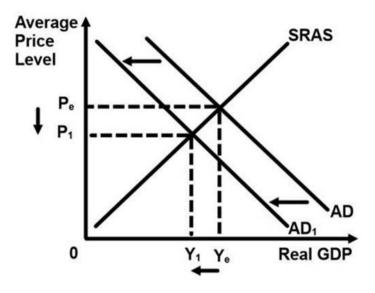
[4]

Level		Marks
0	The work does not meet a standard described by the descriptors below.	0
1	There is a correct diagram <b>OR</b> an accurate written response.	1–2
	AD/AS diagram showing a shift of the AD curve to the left and a decrease in real GDP <b>OR</b>	
	An explanation that higher interest rates would reduce consumption and/or investment, causing a fall in AD and a fall in real GDP/economic growth or an increase in unemployment.	
2	There is a correct diagram <b>AND</b> an accurate written response.	3–4
	AD/AS diagram showing a shift of the AD curve to the left and a decrease in real GDP <i>AND</i>	
	An explanation that higher interest rates would reduce consumption and/or investment, causing a fall in AD and a fall in real GDP/economic growth or an increase in unemployment.	

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. For the horizontal axis, real output, real national output, real income, real national income, real GDP or real Y. Any abbreviations are acceptable. A title is not necessary. "AS" is a valid label for the SRAS curve.





(d) Evaluate the likely effects of Nigeria's change from a fixed exchange rate system to a managed exchange rate system.

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

Do not award beyond Level 2 if the answer does not contain reference to the information provided.

Level		Marks
0	The work does not meet a standard described by the descriptors below.	0
1	Few relevant concepts are recognized.	1–2
	There is basic knowledge/understanding.	
2	Relevant concepts are recognized and developed in reasonable depth.	3–5
	There is clear knowledge/understanding.	
	There is some attempt at application/analysis.	
3	Relevant concepts are recognized and developed in reasonable depth.	6–8
	There is clear knowledge/understanding.	
	There is effective application/analysis.	
	There is synthesis/evaluation, supported by appropriate theory and evidence.	

#### Command term

"Evaluate" requires candidates to make an appraisal by weighing up the strengths and limitations. Opinions and conclusions should be presented clearly and supported with appropriate evidence and sound argument. [8]

### Responses may include:

### Strengths:

- will not need to use foreign currency reserves as much, which have fallen, to control the exchange rate (paragraph ●)
- the lower exchange rate should improve the balance of trade and so increase aggregate demand, helping to combat the negative economic growth (paragraph ②)
- the lower exchange rate may attract foreign investment
- interest rates will be freer for use in other policies
- could reduce levels of speculation
- lower export prices and higher import prices may increase AD and cause economic growth (paragraph <sup>(G)</sup>) depending on the Marshall Lerner condition
- could encourage import substitution (paragraph ♥) and help to diversify the Nigerian economy.

### Limitations:

- there may still be some need to use reserves to maintain the "managed float" (paragraph <sup>(G)</sup>)
- the fall in the value of the naira will raise the prices of imported necessity goods, negatively affecting poverty
- increased uncertainty and harder to plan ahead, which may limit the inflow of FDI
- speculation may increase
- the falling value of the naira may cause cost-push inflation/imported inflation (paragraph <sup>(G)</sup>)
- may increase the cost of imported raw materials, increased cost of production to Nigerian firms, loss of competitiveness and possibly unemployment
- there may be a need for tighter monetary policy to deal with the higher inflation. This would increase the exchange rate and undo many of the benefits (paragraph ♥).

### Any reasonably balanced evaluation.

To reach level 3, candidates must be aware of the particular situation in the Nigerian economy, not just present a discussion of changing from a fixed exchange rate to a floating exchange rate in general.

#### Section B

– 11 –

**3.** (a) (i) Define the term *poverty trap* indicated in bold in the text (paragraph **②**).

[2]

Level		Marks
0	The work does not meet a standard described by the descriptors	0
	below.	
1	Vague definition.	1
	The idea that people cannot escape from poverty.	
2	Accurate definition.	2
	An explanation that it is any <b>one</b> of the following:	
	any linked combination of factors which causes poverty to be	
	self-perpetuating with low income as the cause	
	• low incomes lead to low saving which leads to low investment	
	which leads to low growth which leads to low income	
	<ul> <li>low incomes lead to low levels of human capital that leads to</li> </ul>	
	low productivity that leads to low incomes.	

**NB** drawing the poverty cycle without comment **[1]**. Needs further explanation for **[2]**.

(ii) Define the term *total revenue* indicated in bold in the text (paragraph **③**).

[2]

Level		Marks
0	The work does not meet a standard described by the descriptors below.	0
1	Vague definition.	1
	Vague idea that total revenue is the money that a firm gets for its products.	
2	Accurate definition.	2
	<ul> <li>An explanation that it is one of the following:</li> <li>total revenue is the income that a firm generates (in a given time period) by selling goods or providing services to its customers <ul> <li>OR</li> <li>total revenue equals the price multiplied by the quantity of the product sold (for a given time period) OR price × output (or equivalent formula).</li> </ul> </li> </ul>	

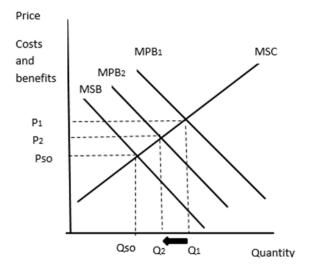
(b) Using an externalities diagram, explain how the widespread use of solar panels will decrease the negative externalities of consumption caused by the use of kerosene lamps (paragraph **⑤**).

[4]

Level		Marks
0	The work does not meet a standard described by the descriptors below.	0
1	There is a correct diagram <b>OR</b> an accurate written response.	1–2
	An externalities diagram with MPB>MSB and showing a decrease in the MPB moving closer to the MSB, reducing output (towards the socially efficient level of output) <b>OR</b>	
	An externalities diagram with MPB>MSB with an explanation of a decrease of MPB to MSB <b>OR</b>	
	As the demand for solar panels increases, the MPB for kerosene lamps decreases (substitutes). As a result, the output of kerosene lamps decreases towards the socially efficient level of output <i>OR</i> the externalities caused by kerosene lamps are reduced.	
2	There is a correct diagram <b>AND</b> an accurate written response.	3–4
	An externalities diagram with MPB>MSB and showing a decrease in the MPB moving closer to the MSB, reducing output (towards the socially efficient level of output) <i>OR</i>	
	An externalities diagram with MPB>MSB with an explanation of a decrease of MPB to MSB <b>AND</b>	
	As the demand for solar panels increases, the MPB for kerosene lamps decreases (substitutes). As a result, the output of kerosene lamps decreases towards the socially efficient level of output <i>OR</i> the externalities caused by kerosene lamps are reduced.	
	<b>NB</b> Sketching the welfare loss is not required for candidates to achieve full marks.	

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

The horizontal axis can be labelled output/quantity **OR** Q. The vertical axis can be labelled cost/benefit **OR** price/P. A title is not necessary.



– 13 –

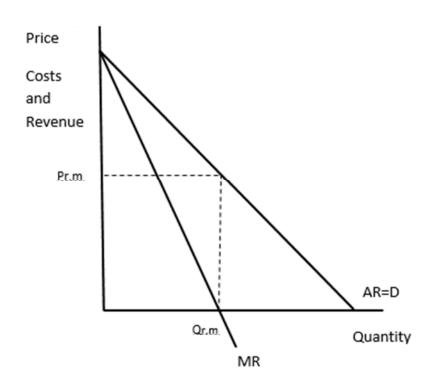
(c) Using a theory of the firm diagram, explain the output and pricing decision of M-Kopa if it chooses to pursue the goal of revenue maximization (paragraph **@**).

[4]

Level		Marks
0	The work does not meet a standard described by the descriptors below.	0
1	There is a correct diagram <b>OR</b> an accurate written response.	1–2
	For drawing a correctly labelled diagram of the market for solar panels with the revenue maximizing level of output set at MR = 0 and price (P) <b>OR</b>	
	Revenue maximization is when $MR = 0$ . M-Kopa will continue to increase output as long as selling any extra panel will increase its total revenue (MR is positive) (until the point where selling an extra panel will decrease total revenue).	
2	There is a correct diagram <b>AND</b> an accurate written response.	3–4
	For drawing a correctly labelled diagram of the market for solar panels with the revenue maximizing level of output set at MR = 0 and price (P) <i>AND</i>	
	Revenue maximization is when $MR = 0$ . M-Kopa will continue to increase output as long as selling any extra panel will increase its total revenue (MR is positive) (until the point where selling an extra panel will decrease total revenue).	
	<b>NB</b> Both the revenue maximizing level of output and the corresponding price must be indicated on the diagram.	

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

The use of P/C/R and Q/quantity/output on the axes is sufficient for a theory of the firm diagram. A title is not necessary.



- 14 -

(d) Using information from the text/data and your knowledge of economics, examine the extent to which access to credit and appropriate technology can contribute to economic development in Kenya.

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

Do not award beyond Level 2 if the answer does not contain reference to the information provided.

Level		Marks
0	The work does not meet a standard described by the descriptors	0
	below.	
1	Few relevant concepts are recognized.	1–2
	There is basic knowledge/understanding.	
2	Relevant concepts are recognized and developed in reasonable	3–5
	depth.	
	There is clear knowledge/understanding.	
	There is some attempt at application/analysis.	
3	Relevant concepts are recognized and developed in reasonable	6–8
	depth.	
	There is clear knowledge/understanding.	
	There is effective application/analysis.	
	There is synthesis/evaluation, supported by appropriate theory	
	and evidence.	

#### Command term

"Examine" requires candidates to consider an argument or concept in a way that uncovers the assumptions and interrelationships of the issue.

[8]

– 15 –

Responses may include:

- definition of economic development
- definition of appropriate technology
- definition of access to credit (including micro-credit)
- a way to break out of the poverty trap (paragraph ❷)
- access to credit allows farmers to move away from subsistence farming (paragraph ②)
- examples of access to M-Kopa solar panels, allows shopkeepers to have access to electricity, keep shops open and earn more income, which contributes to economic development (paragraph ●)
- customers can save US\$750 over four years (paragraph 𝔤)
- solar power as an alternative to "dirty" electricity (causing negative externalities)
- M-Kopa offers loans for other equipment (paragraph ④) which would improve the standards of living, that customers otherwise weren't able to afford, due to a lack of collateral (paragraph ④)
- buying a water tank would improve sanitation (paragraph ④)
- the company is offering loans to pay for school fees, improving education (paragraph ④)
- better health due to the reduction of kerosene use (paragraph G)
- increasing access to credit of US\$100 000 per day to people who might otherwise not have access to credit (paragraph <sup>(G)</sup>)
- M-Kopa (potentially) employs locals.

Any reasonable examination.

To reach level 3, candidates must make reference to economic development, and both access to credit and appropriate technology should be addressed in reasonable depth. If a candidate only examines credit or appropriate technology a maximum of **[5]** should be awarded.

#### 4.

(a) (i) Define the term *infrastructure* indicated in bold in the text (paragraph  $\mathbf{0}$ ).

[2]

Level		Marks
0	The work does not meet a standard described by the descriptors	0
	below.	
1	Vague definition.	1
	<ul> <li>The idea that it is (any one of the following is sufficient):</li> <li>large scale public systems (services and facilities) of a country</li> <li>necessary for economic activity</li> <li>adding to the capital stock of a nation</li> </ul>	
	usually supplied by the government.	
2	Accurate definition.	2
	<ul> <li>An explanation that it is (any two of the following is sufficient):</li> <li>large scale public systems (services and facilities) of a country</li> <li>necessary for economic activity</li> <li>adding to the capital stock of a nation</li> <li>usually supplied by the government</li> </ul>	
	<ul> <li>adding to the capital stock of a flation</li> <li>usually supplied by the government.</li> </ul>	

### (ii) Define the term *sustainability* indicated in bold in the text (paragraph **⑤**).

[2]

Level		Marks
0	The work does not meet a standard described by the descriptors	0
	below.	
1	Vague definition.	1
	The idea that it deals with the long-term use of resources.	
2	Accurate definition.	2
	An explanation that it is development/economic	
	growth/consumption that meets the needs of the present	
	generation without compromising the ability of future	
	generations to meet their needs.	

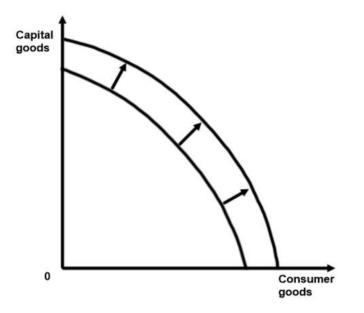
(b) Using a production possibility curve (PPC) diagram, explain how "public investment in infrastructure" can affect the production possibilities in Myanmar (paragraph ♥).

[4]

Level		Marks
0	The work does not meet a standard described by the descriptors below.	0
1	There is a correct diagram <b>OR</b> an accurate written response.	1–2
	For drawing a PPC diagram showing an increase in production possibilities (outward shift of the PPC) <b>OR</b>	
	For an explanation that an increase in infrastructure will increase the quality and/or quantity and/or efficiency / productivity of capital/resources, leading to an increase in the production possibilities (potential output) of the economy.	
2	There is a correct diagram <b>AND</b> an accurate written response.	3–4
	For drawing a PPC diagram showing an increase in production possibilities (outward shift of the PPC) <i>AND</i>	
	For an explanation that an increase in infrastructure will increase the quality and/or quantity and/or efficiency / productivity of capital/resources, leading to an increase in the production possibilities (potential output) of the economy.	

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

For a PPC, the axes could be two alternative products, one on each axis, eg Good A & Good B or Schools & Motor Cars; or two groups of products, eg Consumer Goods and Producer Goods.

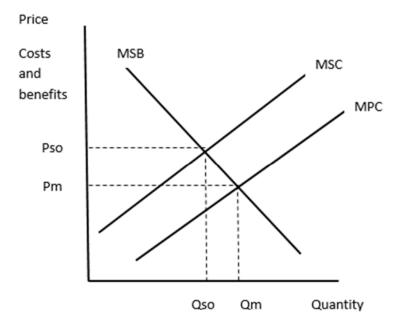


Using an externalities diagram, explain how the "construction of a copper mine" might lead to market failure (paragraph  $\boldsymbol{\Theta}$ ). (C)

Level		Marks
0	The work does not meet a standard described by the descriptors	0
	below.	
1	There is a correct diagram <b>OR</b> an accurate written response.	1–2
	For drawing a market failure diagram where MSC is greater than	
	MPC and a socially efficient level of output lower than the free	
	market equilibrium level of output	
	OR	
	For explaining that the construction of a copper mine is	
	operating where MSC>MPC (socially inefficient level of output),	
	the copper mine imposes external costs on third parties (not	
	reflected in the market price), leading to market failure.	
2	There is a correct diagram <b>AND</b> an accurate written response.	3–4
	For drawing a market failure diagram where MSC is greater than	
	MPC and a socially efficient level of output lower than the free	
	market equilibrium level of output	
	AND	
	For explaining that the construction of a copper mine is	
	operating where MSC>MPC (socially inefficient level of output),	
	the copper mine imposes external costs on third parties (not	
	reflected in the market price), leading to market failure.	

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

The vertical axis may be labelled price but could be costs and benefits and the horizontal axis labelled quantity/output.



(d) Using information from the text/data and your knowledge of economics, evaluate the likely impact of foreign direct investment on Myanmar's economic development.

[8]

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

Do not award beyond Level 2 if the answer does not contain reference to the information provided.

Level		Marks
0	The work does not meet a standard described by the descriptors below.	0
1	Few relevant concepts are recognized.	1–2
	There is basic knowledge/understanding.	
2	Relevant concepts are recognized and developed in reasonable depth.	3–5
	There is clear knowledge/understanding.	
	There is some attempt at application/analysis.	
3	Relevant concepts are recognized and developed in reasonable depth.	6–8
	There is clear knowledge/understanding.	
	There is effective application/analysis.	
	There is synthesis/evaluation, supported by appropriate theory and evidence.	

#### Command term

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

Responses **may** include:

- definition of economic development
- definition of FDI.

## Consideration of potential benefits of FDI for development:

- provision of infrastructure may lead to economic growth which may lead to economic development (paragraph ❶)
- FDI directly helps to boost economic growth rates and job opportunities in Myanmar, thereby improving the real income earned per person
- foreign firms facilitate the transfer of knowledge, which can help to improve the quality of the local labour (human capital), thereby enabling domestic workers to gain higher-paying jobs

– 20 –

- to attract more FDI, the government will have to invest more in infrastructure (paragraph ♥)
- with increased access to infrastructure and electricity, more households could enjoy a higher standard of living and greater access to merit goods (*eg* healthcare and education services)
- to attract more FDI, the government will have to invest in human capital, potentially raising the living standards
- if Myanmar attracts Japanese and South Korean manufacturing MNCs, there might be increased access to consumer goods (paragraph <sup>(G)</sup>)
- other possible benefits include:
  - o filling the domestic savings gap
  - o improving the country's infrastructure
  - o increasing exports
  - o bringing in more foreign exchange
  - o greater tax revenues may be used to finance development objectives.

### Consideration of potential costs of FDI for development:

- unsustainable development (paragraph G)
- MNCs may not necessarily create jobs for locals. Even if there are, domestic workers may be limited to low-end paying jobs, or subjected to unfair employment conditions (paragraph 9)
- MNCs may not lead to diversification and the need for higher value-added production (paragraph <sup>(G)</sup>)
- to attract MNCs, Myanmar may pursue "regulatory incentives" which may be harmful (paragraph )
- although MNCs may contribute to tax revenues, the tax incentives offered to attract MNCs may diminish this (paragraph <sup>(G)</sup>)
- some FDI exploit a country's scarce resources and are mainly beneficial the MNC.

Any reasonable evaluation.