

Name:		Index Number:		Class:	
--------------	--	----------------------	--	---------------	--



DUNMAN HIGH SCHOOL
Preliminary Examination
Year 6

Economics

8823/01

Paper 1 Case Study

19 September 2018

3 hours

Additional Materials:
Answer Paper

READ THESE INSTRUCTIONS FIRST

Write your name and class on the work you hand in.

Write in dark blue or black pen on both sides of the paper.

You may use an HB pencil for any diagrams or graphs.

Do not use staples, paper clips, glue or correction fluid.

Answer **all** questions.

Write your answers on the separate answer paper provided.

At the end of the examination, fasten all your work securely together.

The number of marks is given in brackets [] at the end of each question or part question.

This document consists of **9** printed pages including this cover page.

[Turn over

Answer **all** questions

Question 1: The Decline of Food Prices and Sustainable Agriculture

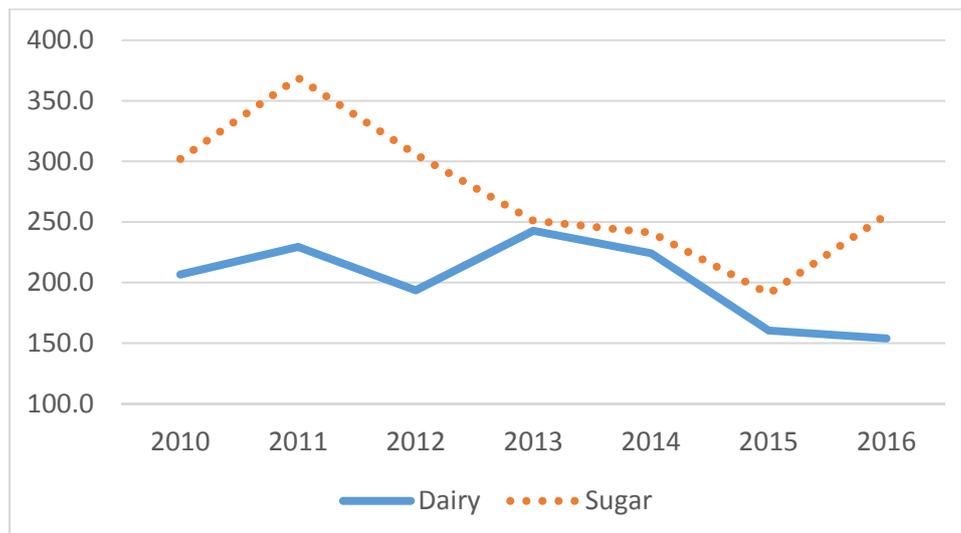
Table 1: Annual Food and Crude Oil Prices

The table below shows an index of international food prices and crude oil prices over the period 2007-2016. The Food Price Index is a measure of the change in international prices of a basket of food commodities consisting of meat, cereals, dairy, edible oil and sugars.

Year	Food	Crude Oil
2002	100	100
2007	161	288
2008	201	392
2009	160	248
2010	188	329
2011	229	444
2012	213	448
2013	210	436
2014	202	396
2015	164	208
2016	162	176

[Sources: imf.org and fao.org, accessed 03.09.18]

Figure 1: Annual Dairy and Sugar Price Index



[Source: fao.org, accessed 03.09.18]

Extract 1: Food prices on a decline?

A decade after the food price spikes of 2007-8, conditions on world agricultural markets are very different. Production has grown strongly across commodities, and in 2017 reached record levels for most cereals, meat types, dairy products, and fish, while cereal stock levels climbed to all-time highs.

At the same time, demand growth has started to weaken. Much of the impetus to demand over the past decade came from rising per capita incomes in China, which stimulated the country's demand for meat, fish and animal feed. This source of demand growth is decelerating, yet new sources of global demand are not sufficient to maintain overall growth. Moreover, per capita consumption of many commodities is expected to be flat at a global level. This is notable for staple foods such as cereals and roots and tubers, where consumption levels are close to saturation levels in many countries. By contrast, demand growth for meat products is slowing due to regional variation in preferences and disposable income constraints.

[Source: FAO Agricultural Outlook 2018, accessed 03.09.18]

Extract 2: The end of the biofuel boom?

Starting in the early 2000s, biofuels emerged as a major 'consumer' of several crops. The US, the EU and Brazil, among other countries, encouraged the growth in biofuels as a way to reduce greenhouse gas emissions and/or achieve energy security. This stimulated global demand for maize and sugarcane, as well as vegetable oils, which in turn contributed to the robust demand growth in global agriculture. However, in recent years, biofuels have gradually disappeared as a source of demand growth and, as a result, the growth in demand for maize and vegetable oils will slow down significantly.

[Source: CEPR Policy Portal, 28.02.18, accessed 03.09.18]

Extract 3: Brazil releases maize from state reserves

The Government of Brazil announced in late April the sale of 1 million tonnes of maize from its state reserves. The measure aims to support livestock producers, amidst high domestic prices of yellow maize.

[Source: fao.org, 15.05.18, accessed 03.09.18]

Extract 4: Malawi bans maize exports

In early February, the Government reintroduced a ban on maize exports, which was lifted in late October following the bumper crop in 2017. The re-implementation of the trade measure reflects an expected fall in the 2018 output from last year's above-average level, mainly due to dry weather during the growing season. The ban aims to preserve national grain reserves and stem the impact of tighter domestic supplies.

[Source: fao.org, 15.05.18, accessed 03.09.18]

Extract 5: True cost of food

In many countries there is a worrying disconnect between the retail price of food and the true cost of its production. As a consequence, food produced at great environmental cost in the form of greenhouse gas emissions, water pollution, air pollution, and habitat destruction, can appear to be cheaper than more sustainably produced alternatives.

[Source: FAO Agricultural Report 2015, accessed 03.09.18]

Extract 6: Developing nations face challenges in achieving food security

Agriculture remained a key sector for developing countries, which contributed immensely to economic growth and well-being. Technology and innovation were urgently needed, especially for developing countries, to sustainably increase agricultural production to meet rising demands, improve the global supply chain and decrease food loss and waste.

Further, unsustainable agriculture and food systems, particularly food loss and waste, were major contributors to climate change whose adverse impacts of climate change had undermined the ability of all countries to achieve food security and sustainable growth.

[Source: Inter Press Service, 19.12.16, accessed 03.09.18]

Extract 7: China to deepen reform in agricultural sector

The gist of supply-side reform in China's agricultural sector is to increase the output of high-quality products based on green and innovative production.

The country will maintain its zero increase in the usage of pesticides and fertilizers and vigorously control water usage in the sector. For better farm produce, a group of innovation centres and alliances will be created, and outstanding research will be enhanced. The reform also aims to refine the quality supervision and standard system for farm produce, control soil pollution and encourage agricultural businesses to gain international certifications. China will promote the export of competitive farm produce, cross-border operation of agricultural enterprises and the establishment of global leaders in the sector.

[Source: China Daily, 05.02.17, accessed 03.09.18]

Questions

- (a) With reference to Table 1:
- (i) Compare the change in food prices and crude oil prices over the period 2007-2010. [2]
 - (ii) Identify the relationship between food prices and crude oil prices over the period 2007-2016 and account for the relationship. [4]
- (b) Using Figure 1, compare the change in the prices of dairy and sugar over the period 2010-2016. [2]
- (c) With reference to Extracts 1 and 2, use supply and demand analysis to explain the trend of food prices in recent years. [6]
- (d) Explain how exchange rate depreciation may impact food importing countries. [2]
- (e) Extracts 3 and 4 refer to government intervention in agricultural markets.
- (i) With the use of a supply and demand diagram, explain how the differing government policies in the maize market seek to help the target groups in the two countries, and discuss briefly whether success is guaranteed. [7]
 - (ii) Analyse the effect of the export ban on the consumer expenditure on maize and the long-term effect on the allocation of resources between maize and other crops. [7]
- (f) There exists a divergence between private costs and social costs in the production of food.
- Explain why there is a 'worrying disconnect between the retail price of food and the true cost of its production', as stated in Extract 5. [5]
- (g) Using Extracts 6 and 7, evaluate the implementation of agriculture reforms by the Chinese government to achieve sustainable growth. [10]

[Total: 45]

Marking Guide:

- Be positive in your marking, awarding marks for what is there without being overly influenced by omissions.
- Marks should not be deducted for inaccuracies.
- Part-questions which ask candidates to 'comment' do not use Levels of Response marking guides. There will be a separate mark allocation for 'comment', with either 2 or 3 marks – which will never be more than 50% of the total mark available.
- Part-questions which ask candidates to 'discuss' have a Levels of Response marking guide. In determining the Level that an answer falls in, use a 'best-fit' approach; the answer may therefore not always exhibit all the features of the Level description.
- Having determined the Level, begin your determination of the mark at the midpoint for the Level. Then decide whether to move the mark up or down within the Level to reflect the quality of the answer.
- Marks for evaluation or comment must be added to the mark for knowledge and understanding, interpreting information, application and analysis.
- Differences in marks should be based on the ability of the candidate to demonstrate the various assessment objectives listed in the syllabus and not purely on the ability to itemise further facts from the content of the syllabus.
- Guidance on making allocations for part-questions with a Levels of Response marking:

Total Mark	Analysis/Explanation Levels of Response Mark Range	Marks for Evaluation
7	L1 1-2 L2 3-5	1-2
8	L1 1-3 L2 4-6	1-2
9	L1 1-3 L2 4-6	1-3
10	L1 1-2 L2 3-4 L3 5-7	1-3
11	L1 1-2 L2 3-5 L3 6-8	1-3
12	L1 1-2 L2 3-5 L3 6-9	1-3

Question 1 – Marking Guide

Question	Answer	Marks
1(a)	With reference to Table 1:	
1(a)(i)	<p>Compare the change in food prices and crude oil prices over the period 2007-2010.</p> <p>1 mark each for two valid statements made about the relevant data in Table 1. Each statement needs to make a comparison between food prices and crude oil prices to gain credit.</p> <p>It should be observed from Table 1 that both the prices of food and crude oil experienced an increase over the period (given by the increase in the price indices: 161 to 188 for food and 288 to 329 for crude oil) (1). By expressing the price in a period as a percentage of the price in a base year (indicated by 2002=100), the use of a price index allows for a measurement of how much prices have changed over different periods. The next statement may be to compare the extent of the increase in price for both commodities. This will require a calculation of the percentage change in price between 2007 and 2010 to conclude that food prices experienced a larger magnitude of increase (1).</p> <p>Food: $(\frac{188-161}{161} \times 100 = 16.8\%)$</p> <p>Crude Oil: $(\frac{288-329}{288} \times 100 = 14.2\%)$</p> <p>Computation of the percentage change in price is not necessary to gain full credit.</p>	2
1(a)(ii)	<p>Identify the relationship between food prices and crude oil prices over the period 2007-2016 and account for the relationship.</p> <p>1 mark for <i>identifying</i> the relationship between food prices and crude oil prices to be a positive or direct one (1).</p> <p>1 mark for <i>using</i> the data in Table 1 to <i>describe</i> how the change in crude oil prices is largely consistent with the change in food prices. For e.g. apart for the period 2011-2012, periods in which crude oil prices increased observed a similar increase in food prices; periods in which crude oil prices decreased saw a similar decline in food prices (1).</p> <p>Up to 2 further marks for <i>explaining</i> the likely link(s) between the change in crude oil prices and the change in food prices. This may be to explain how a change in crude oil prices may impact food prices. Crude oil is used as a factor input (FOP) in the production and distribution processes of agricultural commodities – meat, cereals, dairy, edible oil and sugars – that make up food (1). Higher production costs due to an increase in crude oil prices contribute to an increase in food prices, ceteris paribus (1). Also acceptable is an explanation of how an increase in crude oil prices will drive up the demand for biofuel that will consequently add to the demand for agricultural produce, the effect of which is to cause the prices of food commodities to increase.</p>	4

	Diagrammatic analysis is not necessary to gain full credit.	
1(b)	<p>Using Figure 1, compare the change in the prices of dairy and sugar over the period 2010-2016.</p> <p>1 mark each for two valid statements made about the relevant data presented in Figure 1. Each statement needs to make a comparison between dairy prices and sugar prices to gain credit.</p> <p>Both dairy and sugar prices observed an overall decline over the period 2010-2016 (1).</p> <p>Sugar prices peaked in 2011 and thereafter fell sharply while dairy prices experienced a more gradual decline, characterised with periods of falling and rising prices (1).</p> <p>Any other statement, where relevant, should be rewarded.</p> <p>No marks for a non-comparative statement or for mere regurgitation of data.</p>	2
1(c)	<p>With reference to Extracts 1 and 2, use supply and demand analysis to explain the trend of food prices in recent years.</p> <p><i>Question Analysis:</i> <i>Candidates are expected to use supply and demand analysis to explain how the interaction of demand and supply factors has contributed to a decline in food prices in recent years.</i></p> <p>Up to 2 marks for quality of supply and demand diagram used – correctly labelled axes and curves, shifts in correct directions, equilibrium positions correctly identified. Diagram should illustrate a global market for food and a rightward shift in the demand and supply curves, with a larger magnitude of shift for the latter.</p> <p>Up to 4 further marks for <i>explaining</i> that factors to do with the waning effect of rising per capita incomes on food demand, the consumption of staples reaching a saturation point, the disappearance of biofuels as a source of demand growth (due likely to a trend of falling crude oil prices) would have caused a slowdown in the increase in demand for food (1), and factors to do with technological progress, improved farming methods etc. that enabled production to reach ‘record levels’ would have caused supply to increase (1), and an explanation that the increase in supply would have outpaced the demand growth (1) to create a surplus at the original equilibrium price that would eventually cause a resultant fall in the equilibrium price of food (1).</p> <p>Mere regurgitation (e.g. stating that ‘production reached record levels’) does not amount to a proper explanation of demand or supply factors and the relevant mark will not be awarded.</p>	6

	An explanation of the process in which market equilibrium is restored via a price change is required to gain full credit.	
1(d)	<p>Explain how exchange rate depreciation may impact food importing countries.</p> <p>Up to 2 marks for <i>explaining</i> that exchange rate depreciation will result in an increase in the prices of food commodities in terms of the domestic currency of a country since more units of the currency have to be given up to purchase the same quantity of food (1). Given that the demand for food commodities is price inelastic, this will cause the expenditure on food to increase, ceteris paribus. The impact of this may be to cause living standards in food importing countries to stagnate or worsen (1). Also acceptable is to explain how exchange rate depreciation will result in imported inflation that adds to the average price level in food importing countries. Agricultural commodities are used as factor inputs to manufacture or produce processed food. The increase in production costs due to higher prices of food commodities will eventually be passed on to consumers.</p> <p>Not necessary to explain the impact in the context of falling food prices.</p> <p>Diagrammatic analysis is not necessary to gain full credit.</p>	2
1(e)	Extracts 3 and 4 refer to government intervention in agricultural markets.	
1 (e)(i)	<p>With the use of a supply and demand diagram, explain how the differing government policies in the maize market seek to help the target groups in the two countries, and discuss briefly whether success is guaranteed.</p> <p><i>Question Analysis:</i> <i>Against the larger context of a decline in global food prices, candidates should recognise that domestic prices of food commodities in different countries may not observe a similar trend depending on how domestic conditions of demand and supply might have changed. While demand conditions may remain relatively stable, agricultural production continues to be susceptible to the vagaries of nature and deteriorating supply conditions in a country may account for price trends that deviate sharply from international price movements.</i></p> <p><i>In addressing the question, candidates are expected to use supply and demand analysis to explain how the release of stocks by the Brazilian government and the export ban imposed by the Malawi government will impact domestic markets and bring about benefits to consumers and/or producers in the two countries. The ‘discuss’ term requires candidates to consider factors that determine the extent to which the intended outcomes will be achieved.</i></p> <p>Up to 1 mark for quality of supply and demand diagram used – correctly labelled axes and curves, shifts in correct directions, equilibrium positions correctly identified. A single diagram may be used</p>	7

	<p>to represent the domestic market for maize in Brazil and Malawi, with a rightward shift in the supply curve and a resultant increase in equilibrium quantity and decrease in equilibrium price.</p> <p>Up to 4 marks for <i>explaining</i> that the release of stocks and imposing a ban on exports will cause domestic supply in the two countries to increase and bring about a fall in price in the market for maize (2). Candidates may consider how the policies might be able to stem the fall in domestic supply owing to adverse factors (e.g. dry spell in Malawi), in which case the resultant shift may be one of supply falling by a smaller magnitude, thereby moderating the resultant increase in price. Where explained appropriately, such an approach should be rewarded. This will benefit both producers and consumers in the two countries (e.g. livestock farmers in Brazil who rely on maize as a source of cattle feed or producers of processed food that use maize as a factor input) (2).</p> <p>Reference to specific groups of consumers or producers in the two countries is required to gain full credit.</p> <table border="1" data-bbox="363 869 1262 1070"> <tr> <td data-bbox="363 869 440 1003">L2</td> <td data-bbox="440 869 1182 1003">An answer that uses appropriate analysis to explain how target groups in the two countries may be able to benefit from the policies.</td> <td data-bbox="1182 869 1262 1003">3-5</td> </tr> <tr> <td data-bbox="363 1003 440 1070">L1</td> <td data-bbox="440 1003 1182 1070">An answer that merely identifies or describes benefits.</td> <td data-bbox="1182 1003 1262 1070">1-2</td> </tr> </table> <p>In addition, up to a further 2 marks for valid evaluative comment. This should focus on factors that determine the extent to which the intended outcomes may be achieved. One valid point, supported with economic reasoning, can gain full credit.</p> <p>Possible issues or factors include:</p> <ul style="list-style-type: none"> - the amount of stocks or reserves that the Brazilian government holds and its ability to sustain the supply of maize to prop up domestic supply or the extent to which quantities of maize made available through the export ban may be able to shore up domestic supply. - the duration and severity of the dry weather in Malawi that limit the amount of relief provided by the ban on exports. - the possibility of unintended consequences arising from the policies. 	L2	An answer that uses appropriate analysis to explain how target groups in the two countries may be able to benefit from the policies.	3-5	L1	An answer that merely identifies or describes benefits.	1-2	
L2	An answer that uses appropriate analysis to explain how target groups in the two countries may be able to benefit from the policies.	3-5						
L1	An answer that merely identifies or describes benefits.	1-2						
1(e)(ii)	<p>Analyse the effect of the export ban on the consumer expenditure on maize and the long-term effect on the allocation of resources between maize and other crops.</p> <p><i>Question Analysis:</i> Candidates are expected to apply the concept of demand elasticity to explain the effect of the export ban on consumer expenditure and the Marginalist Principle to explain how resource allocation may be impacted in the long run.</p>	7						

	<p>1 mark for quality of use of a supply and demand diagram to illustrate a rightward shift in the supply curve and the change in consumer expenditure.</p> <p>Up to 2 further marks for <i>explaining</i>, with reference to a diagram, that a fall in the price of maize will result in a reduction in consumer expenditure, given that demand is price inelastic. The fall in the domestic price of maize will result in a less than proportionate increase in quantity, <i>ceteris paribus</i>, to the extent that consumer expenditure will reduce. Comparison of the expenditure before and after the policy implementation is required to gain full credit.</p> <p>Up to 4 further marks for <i>explaining</i> that a fall in the price of maize will cause the marginal revenue to decrease relative to marginal cost such that the marginal profit (difference between marginal revenue and marginal cost) from an additional unit of maize produced will reduce (2). Holding the marginal profit of other crops unchanged, the profitability of maize as a cash crop will fall relative to other crops. In the long term, self-interested farmers seeking to maximise profits will be incentivised to cut back the production of maize and switch to other crops, resulting in an allocation of resources away from maize to other food crops (2).</p>	
1(f)	<p>There exists a divergence between private costs and social costs in the production of food</p> <p>Explain why there is a ‘worrying disconnect between the retail price of food and the true cost of its production’, as stated in Extract 5.</p> <p><i>Question Analysis:</i> <i>Candidates should recognise that the ‘true cost’ of food production consists of private costs arising from the use of resources as well as external costs that come about in the form of spillover effects on third parties not directly involved in the production activity.</i></p> <p><i>“Food production has multiple impacts both on and off the farm. These can often be negative, such as the pollution of rivers, the emission of greenhouse gases, the spread of antibiotic resistance, the degradation of soil, the rise of obesity and the spread of disease. Yet none of this damage has featured in the balance sheet of farmers using chemical methods.”</i></p> <p><i>(Source: The True Cost of Food, Patrick Holden, 22.09.16)</i></p> <p><i>In addressing the question, candidates are expected to explain why self-interested producers (including farmers) only consider private costs and do not take into account external costs associated with food production. Since the retail price of food is a reflection of production costs (firms in competitive markets will charge a price that is equal to the lowest unit cost of production), the existence of external costs and the likely scenario of such costs increasing will create a growing</i></p>	5

	<p><i>disconnect between the retail price of food and the true cost of its production. Despite what the price on the shelf may suggest, foods produced through unsustainable means (e.g. intensive use of fertilisers and pesticides) are by no means cheap.</i></p> <p>Up to 2 marks for quality of use of a cost/benefit diagram with correctly labelled axes and curves, to illustrate a divergence between marginal private cost and marginal social cost and identify correctly equilibrium positions.</p> <p>Up to 3 further marks for <i>explaining</i> that the use of ineffective or environmentally unfriendly or detrimental farming methods, which may be potentially destructive in some instances, in some countries, creates external costs in the form of pollution, habitat destruction that give rise to resource depletion and degradation (2). In the context of developing countries, the most important cause of environmental destruction may be due to the overexploitation by poor people of their scarce environmental resources. Poor people lack modern agricultural inputs, and being too poor to buy inputs that preserve the soil's fertility, they deplete the soil's natural minerals, making soils less productive. In richer economies, the external costs may be caused by intensive large-scale farming reliant on chemicals. Such costs are not taken into account by self-interested producers in the production process and consequently will not be factored into the retail prices of food (1). On the other hand, sustainable food production that delivers a wide range of benefits may require the use of relatively more expensive equipment or methods of production that add to production costs which contribute to higher retail prices.</p> <p>Responses or diagrams that focused upon overproduction of food as a result of negative externalities rather than under-pricing will not gain full credit.</p>	
1(g)	<p>Using Extracts 6 and 7, evaluate the implementation of agriculture reforms by the Chinese government to achieve sustainable growth.</p> <p><i>Question Analysis:</i> <i>Candidates should recognise that sustainable growth refers to growth that can be maintained without creating other significant economic problems (such as depleted resources and environmental problems), particularly for future generations. It implies a positive and stable economic growth over an extended period of time. To achieve sustainable growth, countries have to manage and use its resources in such a way that it does not leave behind fewer or lower quality resources for use by future generations. Reforms implemented in China are intended to facilitate a shift towards sustainable agriculture that supports the country's sustainable growth. Candidates are expected to use appropriate analysis to explain how agricultural reforms are able to minimise, if not eliminate, the negative environmental externalities of food production (whose adverse effects on resource quality, health, productivity etc may otherwise constrain the country's ability to grow) and expand the country's productive</i></p>	10

capacity to cope with rising demands. This allows the country to strike a balance between preserving the environment and ensuring an adequate food supply for an expanding population. Evaluation may be to consider the likely effectiveness, feasibility, limitations of the reforms as well as possible trade-offs or unintended consequences arising from the reforms.

Suggested Answer Outline:

[Explain the meaning of sustainable growth]

Sustainable growth refers to growth that can be maintained without creating other significant economic problems (such as depleted resources and environmental problems), particularly for future generations.

[Outline issues relating to agriculture that China is confronted with in achieving sustainable growth]

- Much of the increased food production through agricultural intensification in the past decades had been undertaken at the expense of significant environmental damage that has taken a toll on the country's resources (high intensity of resource use has caused the environment to exhaust its carrying capacity).
- Rising land and labour costs that reduce competitiveness and pose concerns on food security amid an expanding population.
- Widening rural-urban income divide that may hamper growth.

[Outline the key characteristics of China's agriculture reforms]

Agriculture reforms in China seek to increase the quantity and improve the quality and efficiency of resources in agriculture markets with the aim of reducing environmental pressures, while meeting the demands of a growing population and continuing to improve the lives of the rural population. They include:

- providing incentives for sustainable resource use and promotion of green (or 'clean') technologies (apart from market-based policies that internalise production externalities),
- setting standards and adopting internationally recognised best practices or processes,
- expanding productive capacity through technological utilisation and investment (in agricultural enterprises), and
- improving China's competitiveness as a food exporting country.

[Explain the impact of the reforms in terms of reducing negative externalities and expanding productive capacity]

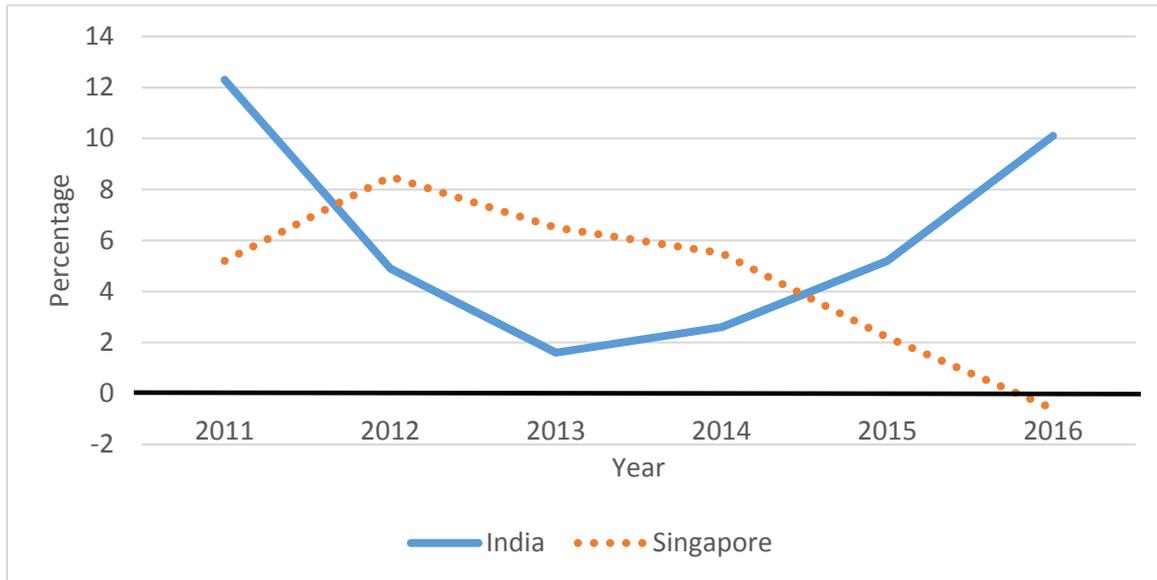
- The introduction of green methods of production and processes promotes environmental preservation and minimises the external costs associated with agricultural production. This effectively reduces the toll that environmental externalities have on the resources of the country. Cuts in spending on health care costs, pollution clean-up, etc. can be diverted to other areas of the economy. Cost and benefit diagram to illustrate.
- Investments in capital goods, research, developing expertise and technology will raise agricultural productivity and contribute to the country's potential growth. This is crucial in meeting the

	<p>consumption needs of an expanding population. AD/AS or PPC diagram to illustrate.</p> <ul style="list-style-type: none"> - Promoting the 'export of competitive farm produce, cross-border operation of agricultural enterprises' as well as encouraging 'agricultural business start-ups' will help develop and sustain the agricultural sector as an engine of rural development that contributes to higher farmer incomes. This has the effect of improving income distribution and brings about inclusive growth. - Competitive markets allow for efficiency in resource allocation as consumers and producers respond to price signals. Reliance on the price mechanism will also ensure that farm products can be sold at reasonable prices. This goes toward encouraging exports as a source of growth. <p>[Explain possible limitations, problems, disadvantages]</p> <ul style="list-style-type: none"> - Huge fiscal outlay. - Opportunity cost of farming labour in terms of wages that workers can earn in manufacturing or other sectors of the economy. - Long and demanding process that requires close coordination between the government and various stakeholders for the intended outcomes of the reforms to be realised. - Possible short-term impact on production cost. - The need to rely on international expertise and technology as well as gain access to global agricultural resources and food trade infrastructure <p>A broad understanding of the concept of sustainable growth and how reforms are able to address environmental concerns and contribute to a country's productive capacity is expected to gain credit.</p> <table border="1" data-bbox="363 1200 1272 1644"> <tr> <td data-bbox="363 1200 459 1368">L3</td> <td data-bbox="459 1200 1182 1368">An answer that uses appropriate analysis to explain how agricultural reforms are able to minimise the impact of negative externalities and expand productive capacity in achieving sustainable growth.</td> <td data-bbox="1182 1200 1272 1368">5-7</td> </tr> <tr> <td data-bbox="363 1368 459 1536">L2</td> <td data-bbox="459 1368 1182 1536">An answer that merely identifies or describes how agricultural reforms are able to minimise the impact of negative externalities and expand productive capacity in achieving sustainable growth.</td> <td data-bbox="1182 1368 1272 1536">3-4</td> </tr> <tr> <td data-bbox="363 1536 459 1644">L1</td> <td data-bbox="459 1536 1182 1644">An answer that demonstrates some knowledge of sustainable growth.</td> <td data-bbox="1182 1536 1272 1644">1-2</td> </tr> </table> <p>In addition, up to a further 3 marks for valid evaluative comment that considers the significance of agriculture reforms in achieving sustainable growth.</p> <p>That the environment is near its carrying capacity underscores the importance of implementing reforms to create a sustainable agricultural and food system through technological innovation to feed the future population. Given the costly outlay, it is crucial that the</p>	L3	An answer that uses appropriate analysis to explain how agricultural reforms are able to minimise the impact of negative externalities and expand productive capacity in achieving sustainable growth.	5-7	L2	An answer that merely identifies or describes how agricultural reforms are able to minimise the impact of negative externalities and expand productive capacity in achieving sustainable growth.	3-4	L1	An answer that demonstrates some knowledge of sustainable growth.	1-2	
L3	An answer that uses appropriate analysis to explain how agricultural reforms are able to minimise the impact of negative externalities and expand productive capacity in achieving sustainable growth.	5-7									
L2	An answer that merely identifies or describes how agricultural reforms are able to minimise the impact of negative externalities and expand productive capacity in achieving sustainable growth.	3-4									
L1	An answer that demonstrates some knowledge of sustainable growth.	1-2									

	Chinese government look to public-private partnerships to attract private capital and expertise into rural infrastructure. Efforts should also be made to encourage large agribusiness to go global to gain access to global agricultural resources.	
--	--	--

Question 2: The Economies of India and Singapore

**Figure 2: Gross Fixed Capital Formation¹ of India and Singapore
(annual percentage growth)**



¹Gross fixed capital formation (GFCF) includes plant, machinery, and equipment purchases; and the construction of roads, railways.

[Source: data.worldbank.org, accessed 27.08.18]

Extract 8: Economic outlook for India and Singapore

The Indian economy has recorded strong growth in recent years, helped by trade gains, private consumption spending, positive policy actions including implementation of key structural reforms, and reduced external vulnerabilities. Inflation has remained low after the collapse in global commodity prices, a range of supply-side measures, and a relatively tight monetary stance.

Singapore has embraced a new growth model for a world of rapidly advancing digital technologies and automation. The strategy is to turn Singapore into a labour-lean economy with less reliance on foreign workers and growth based on innovation, digitalisation, and continuous investment in skills. Economic and social policies in the form of higher fiscal spending to make growth more inclusive and tackle population ageing have advanced appreciably in recent years and are still evolving, complementing the economic transformation drive.

[Sources: IMF Country Report, India, 22.02.17 and IMF Country Report, Singapore 22.06.17, accessed 27.08.18]

Table 2: Selected Statistics for India and Singapore, 2013 – 2016**Real GDP per capita growth, annual percentage, 2013-2016**

	2013	2014	2015	2016
India	5.1	6.1	6.9	5.9
Singapore	3.4	2.5	1.0	1.1

Inflation, consumer prices, annual percentage, 2013-2016

	2013	2014	2015	2016
India	11	6.7	4.9	4.9
Singapore	2.4	1.0	-0.5	-0.5

Nominal wage growth, annual percentage, 2013-2016

	2013	2014	2015	2016
India	-	13.4	10.4	10.3
Singapore	5.3	4.9	4.0	3.1

[Sources: data.worldbank.org, labour.gov.in and stats.mom.gov.sg, accessed 27.08.18]

Extract 9: Chronic under-investment in Indian infrastructure

The traditional post-World War II East Asian² growth model resembles a virtuous cycle based on: attracting foreign investments, building infrastructure and hiring cheap labour, and exporting manufacturing goods to the U.S. and other parts of the developed world. Chronic under-investments into India's infrastructure, combined with foreign investment restrictions, however, have precluded India from adopting this traditional manufacturing export-led growth model so far. According to a June 2016 McKinsey report, India currently has an infrastructure investment gap equivalent to 0.5% of GDP; in addition, 25% of the country's households lack access to electricity, 6% to clean water, and 82% to internet access.

²East Asian economies consist of countries such as Japan, South Korea, China and Taiwan.

[Sources: Forbes 22.03.17, accessed 27.08.18]

Extract 10: India stumbles on business-friendly reforms

That India is pro-business but not necessarily pro-market is a frequent refrain. "The government wants to create jobs, not the environment in which job-creation flourishes," says one investor. Special economic zones are set up sometimes to entice single companies. Even big foreign investors are essentially told what to do: Walmart can only open cash-and-carry stores closed to the general public, Amazon must sell mostly other merchants' goods rather than its own, and so on.

Evidence of the mistrust of markets is abundant. Indian farmers need more fertiliser, but imports are taboo and price controls discourage investment in new factories. No matter: the government has leaned on Coal India and a power utility, of all companies, to try their hand at it. If venture capitalists are wary of funding Indian startups, the state will do it in their stead, badly. A government fund launched five months ago for this purpose has so far made just one investment.

[Source: The Economist 25.06.16, accessed 27.08.18]

Extract 11: Disruptive change weighs on the Singapore economy

The slowdown in Singapore's growth is the result of a confluence of short-term cyclical headwinds, as well as longer-term structural issues.

The world economy has yet to completely shake off the vestiges of the global financial crisis and continues to lack a strong growth driver. This is the result of an "absence of a meaningful rebound in consumer confidence globally, which is weighing on investment and hiring decisions", says CIMB Private Bank economist Song Seng Wun.

"Singapore is caught in that crossfire," he adds, noting that the Republic's key trading partners have all been grappling with their own sets of challenges. World oil prices had been fairly stable from 2010 until mid-2014, at around US\$110 a barrel. But they have almost halved since, plunging the oil and gas industry into a crippling slump. Companies in Singapore have not been spared the effects of this protracted downturn

But some economists say the slowdown is not merely cyclical. Prime Minister Lee Hsien Loong said in his National Day Rally speech in August that disruptive change is the "defining challenge" facing Singapore's economy. Technology has transformed almost every industry - from food delivery to manufacturing. These developments have left both challenges and opportunities in their wake, most obviously in the labour market. There are thousands of jobs waiting to be filled in growing sectors like IT, precision engineering, education and healthcare. But many workers who have been laid off lack the necessary specialised skills required in these roles.

[Source: The Straits Times 30.10.16, accessed 27.08.18]

Questions

- (a) With reference to Figure 2 and Table 2:
- (i) Compare the gross fixed capital formation over the period 2013-2016 between India and Singapore. [2]
 - (ii) Explain a possible reason for the trend of India's gross fixed capital formation growth over the period 2013-2016. [2]
 - (iii) Using a PPC diagram, explain an opportunity cost arising from a country's decision to allocate more resources to investment spending. [4]
- (b) Explain the meaning of real GDP per capita. [2]
- (c) How far does the data in Table 2 allow one to conclude whether the average Indian or the average Singaporean is likely to experience a larger improvement in living standards over the period 2013-2016? [7]
- (d) Using AD/AS analysis, explain how a collapse in commodity prices (Extract 8) and a relatively tight monetary stance (Extract 8) have kept inflation low in India. [7]
- (e) Extract 11 suggests that slowing growth in Singapore is due to a 'confluence of short-term cyclical headwinds, as well as longer-term structural issues'. Discuss the relative importance of cyclical and structural factors in causing growth to slow down. [9]
- (f) India has progressed towards a free-market economy that saw the government introduce policies that included a reduction of taxes and subsidies, removal of price controls and opening up domestic markets for foreign investment. The International Monetary Fund says India also needs active government intervention to increase infrastructure spending.
- Assess the case for a greater reliance on the free market, rather than government intervention, to achieve economic growth and low unemployment. [12]

[Total: 45]

Marking Guide:

- Be positive in your marking, awarding marks for what is there without being overly influenced by omissions.
- Marks should not be deducted for inaccuracies.
- Part-questions which ask candidates to 'comment' do not use Levels of Response marking guides. There will be a separate mark allocation for 'comment', with either 2 or 3 marks – which will never be more than 50% of the total mark available.
- Part-questions which ask candidates to 'discuss' have a Levels of Response marking guide. In determining the Level that an answer falls in, use a 'best-fit' approach; the answer may therefore not always exhibit all the features of the Level description.
- Having determined the Level, begin your determination of the mark at the midpoint for the Level. Then decide whether to move the mark up or down within the Level to reflect the quality of the answer.
- Marks for evaluation or comment must be added to the mark for knowledge and understanding, interpreting information, application and analysis.
- Differences in marks should be based on the ability of the candidate to demonstrate the various assessment objectives listed in the syllabus and not purely on the ability to itemise further facts from the content of the syllabus.
- Guidance on making allocations for part-questions with a Levels of Response marking:

Total Mark	Analysis/Explanation Levels of Response Mark Range	Marks for Evaluation
7	L1 1-2 L2 3-5	1-2
8	L1 1-3 L2 4-6	1-2
9	L1 1-3 L2 4-6	1-3
10	L1 1-2 L2 3-4 L3 5-7	1-3
11	L1 1-2 L2 3-5 L3 6-8	1-3
12	L1 1-2 L2 3-5 L3 6-9	1-3

Question 2 – Marking Guide

Question	Answer	Marks
2(a)	With reference to Figure 2:	
2(a)(i)	<p>Compare the gross fixed capital formation over the period 2013-2016 between India and Singapore.</p> <p>1 mark each for two valid statements made about the relevant data in Table 1. Each statement needs to make a comparison between the levels of gross fixed capital formation in the two countries.</p> <p>It should be observed from Figure 2 that both countries recorded an overall increase in the level of gross fixed capital formation over the period 2013-2016, given by the positive growth rate (albeit a negative growth rate for Singapore in 2016) (1). The next statement may be to compare the rate of increase in GFCF for both countries. GFCF in India expanded at an increasing rate while GFCF in Singapore grew at a decreasing rate (1).</p>	2
2(a)(ii)	<p>Explain a possible reason for the trend of India's gross fixed capital formation growth over the period 2013-2016.</p> <p>Up to 2 marks for <i>identifying</i> a possible reason and for <i>explaining</i> it. Following consecutive years of a decline in GFCF growth, India experienced a revival in investment spending over the period 2013-2016 characterised by higher rates of year-on-year increase. There are many different possible reasons to account for such a trend. Any reason with valid economic reasoning should be accepted. One possible reason may have to do with a fall in interest rates, though the 'relatively tight monetary stance' in Extract 8 might not support such a view. Other possible reasons include government policies toward state-led investment spending, improved market prospects or business environment that lifted the profits expectations of firms, or favourable domestic or external factors that encouraged private sector investment. For e.g. an increase in external demand (trade gains) may contribute to a pick-up in manufacturing activity reliant on capital-intensive production in India, the effect of which is to spur firms to spend more on capital goods to support the output expansion.</p> <p>An explicit link to the increase in GFCF growth is necessary to gain full credit.</p>	2
2(a)(iii)	<p>Using a PPC diagram, explain an opportunity cost arising from a country's decision to allocate more resources to investment spending.</p> <p>Up to 2 marks for quality use of a Production Possibility Curve diagram with correctly labelled curves and axes, relevant positions on the curve correctly identified. Diagram should illustrate investment or capital goods on one axis in comparison with a suitable good (e.g.</p>	4

	<p>consumption goods) on the other axis, with a fall in quantity of the good in comparison as the quantity of investment goods increases.</p> <p>Up to 2 further marks for <i>explaining</i> an opportunity cost, expressed as the value of the next best alternative foregone, associated with an increase in investment spending. In the context of a PPC depicting two goods, the opportunity cost of producing more quantities of one good would be the quantities of the other good that have to be given up, assuming that all resources are fully employed. This may be expressed as a trade-off between consumption (for current SOL) and investment (for future SOL). With reference to a PPC depicting different possible combinations of the maximum quantities of consumer and investment goods and assuming that all resources are efficiently utilised in an economy, the opportunity cost of allocating more resources to investment spending (for maintaining and expanding productive capacity) may be the consumables (for current satisfaction) that have to be given up. Expressing one of the most fundamental ideas in economics, the trade-off is such that to produce more in the future, the economy must accept less satisfaction in the present.</p>	
2(b)	<p>Explain the meaning of real GDP per capita.</p> <p>1 mark for <i>explaining</i> that GDP is a measure of the market value of final goods and services produced within the geographical boundaries of a country in a given time period (usually a year).</p> <p>Up to 1 further mark for explaining that ‘real’ has to do with a measure of GDP that has eliminated the influence or effects of changes in the price level and ‘per capita’ as the value of GDP divided by the number of people in a country’s population.</p> <p>No mark for expressing ‘real’ to mean that inflation or deflation has been ‘accounted for’.</p>	2
2(c)	<p>How far does the data in Table 2 allow one to conclude whether the average Indian or the average Singaporean is likely to experience a larger improvement in living standards over the period 2013-2016?</p> <p><i>Question Analysis:</i> <i>Candidates are expected to use appropriate analysis to explain the relevance and sufficiency of the data presented in Table 2 in gauging or assessing the change in living standards in the two countries. This may be to explain the direct links between the statistical data and the likely change in living standards in the two countries as well as the limitations of the data and the relevance of other economic information in drawing conclusions. The ‘how far’ terms in the stem of the question require candidates to consider the extent of the limitations of the data both in terms of the problems associated with their computation (e.g. national income statistics may not accurately measure the true value of output or income in an economy) and their adequacy as measures</i></p>	7

of living standards (i.e. does the data sufficiently account for every aspect of SOL).

Up to 5 marks for *explaining*, as follows:

Definition of standard of living in terms of the material and non-material aspects of well-being.

A sustained increase in real per capita GDP over the years, given by the robust growth rates, means that Indian residents on average enjoyed a higher level of real income which made it possible to purchase a larger quantity of goods and services, thus allowing for improvements in their livelihoods. Compounded over time, that growth rates remained consistently above 5% indicates that there was a significant improvement in living standards. In comparison, the rate of real GDP per capita growth for Singapore was much lower over the same period.

Despite the elevated rates of inflation, real wage growth (nominal wage growth adjusted for the effects of inflation) for India exceeded that of Singapore, considering the impressive nominal wage growth for the former. Since real wage is a direct measure of purchasing power, on this note, the average Indian seems to have experienced a larger improvement in living standards over the period.

As a measure of the true value of output or income, national income statistics (real GDP per capita) have limitations to do with:

- non-marketed or non-transacted output that may be significant in less developed countries as well as output sold in underground markets may not be included
- improvements in the quality of goods and services are not taken into account
- value of negative externalities, such as pollution and other undesirable by-products of production or consumption is not accounted for

In addition, income statistics or wages may be inadequate as measures of standards of living. The inadequacies include:

- use of real GDP per capita and real wage growth as an indicator of average output/income or average wage growth per person
- relevance of other economic information such as income distribution, levels of education & health, life expectancy, leisure time, as well as quality of life factors such as the crime rate, a sense of security and peace arising from relations with other countries, well-functioning institutions (free of corruption), stress levels from working conditions, the degree of political freedom etc. to account for SOL adequately.

L2

An answer that uses appropriate analysis to explain both the relevance and limitations of the data in assessing the change in living standards in the two countries.

3-5

	<table border="1"> <tr> <td data-bbox="360 226 440 365">L1</td> <td data-bbox="440 226 1179 365">An answer that merely describes the relevance of the data in assessing the change in living standards in the two countries.</td> <td data-bbox="1179 226 1259 365">1-2</td> </tr> </table>	L1	An answer that merely describes the relevance of the data in assessing the change in living standards in the two countries.	1-2	
L1	An answer that merely describes the relevance of the data in assessing the change in living standards in the two countries.	1-2			
2(d)	<p>In addition, up to a further 2 marks for valid evaluative comment. This may be to comment that, given the huge disparity in socio-economic conditions, the lack of a sufficient range of economic information relating to the non-material aspects of SOL means that income or wage data are clearly not enough for one to draw conclusions about improvements in living standards in India and Singapore, no matter how accurately the data may be representative of the output or purchasing power an average individual enjoys in the two countries.</p> <p>Using AD/AS analysis, explain how a collapse in commodity prices (Extract 8) and a relatively tight monetary stance (Extract 8) have kept inflation low in India.</p> <p>Up to 2 marks for quality use of an AD/AS diagram – correct labelling of axes, curves, equilibrium points, etc., and correct identification of the scenario – shift of AD and AS curves in the context of the Indian economy. One possible diagram may be to illustrate a rightward shift in the AD curve and a leftward shift in the AS curve, both shifts being moderated by the two factors to the extent that the increase in GPL is reduced.</p> <p>Up to 4 further marks for <i>explaining</i> each scenario, as follows:</p> <p>A collapse in commodity prices means that prices of agricultural commodities and non-agricultural commodities such as metals (copper, iron ore), crude oil etc. have taken a tumble. Given that India imports a significant quantity of these items and since these raw materials are widely used as factor inputs across different sectors and industries, the decline in commodity prices will lower firms' production costs and cause AS to increase (2). Candidates may also explain that there may be other more significant cost-push factors giving rise to a fall in AS, in which case, the effect of the decline in commodity prices may be to moderate the fall in AS to bring about a smaller leftward shift. Where explained appropriately, such an approach should be rewarded.</p> <p>The effect of a collapse in commodity prices may also be to cause a fall in the prices of agricultural commodity exports from India. Given that demand is likely to be price-inelastic, a fall in price will result in a less than proportionate increase in quantity ceteris paribus, giving rise to a fall in export revenue. This will have the effect of lowering (X-M) and hence reducing AD, holding everything else unchanged. A relatively tight monetary stance has to do with the Reserve Bank of India (RBI) opting to raise interest rates or to keep interest rates at elevated levels, likely due to heightened inflationary expectations. This will have the effect of dampening private consumption and investment</p>	7			

	<p>spending (2). Given that domestic demand is likely to be buoyed by robust growth in industrial and manufacturing activity, including higher household spending spurred by wage growth, the resultant effect may be a smaller magnitude of increase in AD, in which case, the increase in GPL via the multiplier effect will be reduced.</p> <p>1 further mark for <i>explaining</i> the combined effect of the factors on inflation.</p> <p>The combined effects of both AD and AS shifts on the GPL should be clearly explained in relation to how inflation is kept low (1). Depending on the approach taken by candidates, this may be to explain that the increase in GPL has been moderated by either a fall in AS in combination with an increase in AD OR a lower resultant increase in AD and fall in AS, the magnitude of both shifts would otherwise have been more pronounced if not for the two factors.</p> <p>Explanation of the likely impact on AS of a collapse in commodity prices is necessary to gain full credit.</p>	
2 (e)	<p>Extract 11 suggests that slowing growth in Singapore is due to a ‘confluence of short-term cyclical headwinds, as well as longer-term structural issues’. Discuss the relative importance of cyclical and structural factors in causing growth to slow down.</p> <p><i>Question Analysis:</i></p> <p><i>The severity of the recession triggered by the 2008 financial crisis and the sluggishness of the subsequent recovery (including the slowdown in growth of economies relatively unaffected by the events) have raised questions about the relative weight of structural and cyclical factors that may impact the growth and employment in an economy. A small and open economy like Singapore is spared from neither. Cyclical factors have to do with the upturns and downturns of the economic cycle of expansion and contraction. While cyclical factors tend to be relatively short-lived and may be easily offset by an appropriate fiscal or monetary stance (e.g. fiscal and monetary stimulus during periods of recession), structural factors are more deep-seated and long-lived and are not easily overcome by such policies. The latter is commonly associated with the ‘supply-side’ of the economy, which determines a country’s productive capacity (recall PPC and the vertical segment of the AS curve). These factors include infrastructure, quality institutions, workforce, level of education and training, labour and goods market efficiency, financial market development, extent of technological readiness, market size etc. Given Singapore’s dependence on external demand for its exports, cyclical factors to do with an economic downturn in the economies of her major trading partners may cause export demand growth to slow and weigh on Singapore’s economic growth. However if Singapore’s market size (including foreign markets) is affected by a fall in trade volume due to China’s rebalancing of its economy (transition towards domestic consumption away from investment as a source of growth will cause the overall level of imports to fall) or if Singapore embraced a growth model characterised by a shift towards innovation and technological utilisation, then such factors</i></p>	9

	<p><i>are structural in nature. The relative weight of the factors will then depend on the magnitude and duration of the cyclical and structural shocks, as well as, the ability of the government to provide an effective policy response to mitigate the effects (e.g. drag on growth and job creation).</i></p> <p>Up to 1 mark for quality use of an AD/AS diagram – correct labelling of axes, curves, equilibrium points, etc., and correct identification of the scenario – shift of AD and AS curves in the context of the Singapore economy. One possible diagram may be to illustrate a rightward shift in the AD curve moderated by a cyclical factor (e.g. fall in export growth) and a leftward shift in the AS curve due to a structural factor (e.g. increase in foreign worker levy), with a resultant increase in</p> <p>Up to 5 marks <i>explaining</i> each scenario, as follows:</p> <p>Slowing growth to do with a lower rate of increase in real national income.</p> <p>Cyclical headwinds have to do with the ‘absence of a meaningful rebound in consumer confidence globally’ that may explain the lack of a significant pick-up in consumer and investment spending as well as the slump in oil prices, among other possible factors. Firms and households in the economies of Singapore’s major trading partners may hold back spending in the face of economic uncertainties and this translates to slower export growth for Singapore. Depressed prices of oil, largely a result of a slowdown in global growth, would also have caused a contraction of revenues for firms in oil and gas-related sectors in Singapore. This would make it difficult to sustain production and firms will be forced to cut back output and lay off workers. The net effect may be a smaller magnitude of increase in aggregate spending for Singapore, depending on how other components of AD may have changed.</p> <p>Structural factors include government policies (e.g. foreign worker levy hikes, incentives to promote innovation and enterprise) to undertake economic restructuring to shift to a growth model underpinned by innovation and technological utilisation, as well as issues to do with weak productivity growth, loss of competitiveness, rising inequality among businesses in adopting new technologies or exploiting technological developments, shrinking labour force etc. These may either add to short-term cost, result in the closure of less competitive firms or contribute to rising structural unemployment that will either cause AS to decrease or limit the expansion of productive capacity, including possible impacts on AD, the effect of which is to dampen growth.</p> <p>Any one factor each for cyclical and structural, if well-explained, is enough to gain full credit.</p> <p>An explicit link to a slowdown in growth is necessary to gain full credit.</p>	
--	--	--

	L2	An answer that uses appropriate analysis to explain how cyclical and structural factors have caused Singapore's growth to slow down.	4-5	
	L1	An answer that merely describes how cyclical and structural factors have caused Singapore's growth to slow down.	1-3	
	<p>In addition, up to 3 further marks for valid evaluative comment. This may be to focus on the magnitude and duration of the cyclical and structural shocks as well as the ability of the Singapore government to provide an effective policy response. While cyclical factors may ease, demand weaknesses in other countries may continue to be impacted by unforeseen events (e.g. political backlashes) that will likely prolong the already subdued global economic recovery. On the other hand, structural changes and developments taking place in the economy provide economic opportunities, apart from short-term disruptions. To the extent that firms are able to exploit them to their advantage and the government is able to ease the transition of the structurally unemployed to expanding sectors, the weight of structural issues may be less.</p>			
2(f)	<p>India has progressed towards a free-market economy that saw the government introduce policies that included a reduction of taxes and subsidies, removal of price controls and opening up domestic markets for foreign investment. The International Monetary Fund says India also needs active government intervention to increase infrastructure spending.</p> <p>Assess the case for a greater reliance on the free market, rather than government intervention, to achieve economic growth and low unemployment.</p> <p><i>Question Analysis:</i> <i>Most of the countries in the world today are mixed economies, an economic system that is strongly based on free markets with varying degree of government intervention. A free-market economy relies on the price mechanism to coordinate the independent decision-making of countless consumers and producers and under competitive conditions, prices work as signals and incentives to determine resource allocation in achieving maximum social surplus. The pursuit of self-interest by economic agents gives rise to risk-taking, enterprise, innovation and investment, which leads to higher levels of output and possibly higher standards of living. It thus follows that, in progressing towards a free-market economy, governments will implement policies that encourage competition and remove impediments such as taxes & subsidies or price controls or wage legislation in both product and resource (labour) markets so as to allow competitive market forces to work freely to achieve greater efficiency in production (through innovation and exploiting technological gains), lower prices and improved quality, and a better allocation of resources, as well as</i></p>			12

increased levels of output, or economic growth. A more competitive labour market will also improve the motivation for workers to work and incentives for firms to hire. Opening up domestic markets for foreign investment works on the same notion in that doing so will raise efficiency, facilitate the transfer of technology, skills and expertise that will allow for an expansion of a country's productive capacity. However free-market outcomes are not always positive. Issues to do with market failures, regional inequalities, income disparities among households and businesses abound. Government intervention, including the provision of infrastructure, investment in human capital, the provision of quality institutions (e.g. a well-developed banking sector, enforcement of property rights, legal recourse, transparency in information), the provision of a stable macroeconomic economy and the provision of a social safety net or income redistribution, may then be necessary to correct market deficiencies (such that the problems do not become serious enough to pose threats to an economy) and to create the conditions in which markets can function effectively. Of course government intervention can often be dogged with poor planning, excessive bureaucracy, and corruption. Assessing the case of a greater reliance on the role of free markets or government intervention may be to consider the stages of economic growth and development a country is in, prevailing economic conditions and particular needs or unique circumstances of a country.

Up to 2 marks for quality use of an AD/AS diagram – correct labelling of axes, curves, equilibrium points, etc., and correct identification of the scenario – shift of AD and AS curves – in achieving economic growth and low unemployment.

Appropriate references should be made to the economies of India and Singapore in discussing the relevance of free market policies and government intervention in achieving economic growth and low unemployment.

Outline factors that may weigh on growth and unemployment in India and Singapore.

Explanation of how free-market policies in the context of the Indian and Singapore economy may be able to achieve economic growth and low employment. This may be to explain the benefits of opening up domestic sectors for foreign investments and adopting a model of growth based on enterprise, innovation and technological adoption. In the case of India, it also has to do with the removal of price controls, including subsidies and taxes as well as paring down state-led investments. The effect of these may be to improve efficiency in resource allocation, long-term competitiveness and allow for an expansion of productive capacity. AD/AS diagram to illustrate

Explanation of disadvantages and weaknesses of free-market policies that include income disparities, environmental externalities, as well as the lack of institutional and infrastructure support that may render such policies ineffective.

	<p>Explanation of the role of government intervention to do with infrastructure provision, investment in human capital, macroeconomic stabilisation, provision of a social safety net etc. Education and health have significant external benefits, thus calling for government intervention (such as direct provision) that increases the consumption of both. Education and health are major factors behind increases in productivity that contribute to economic growth. Where the private sector may not be able to provide for, governments may need to invest in human capital to address emerging skill gaps and to equip workers with relevant industry skills that are in demand. Infrastructure as a type of physical capital, includes water supplies, sanitation and sewerage, power, communication, transportation, roads, irrigation, and many others. All of these play a very important role in promoting economic growth, apart from a direct contribution to improved standards of living. Therefore, there is a strong role for governments in order to ensure the provision of the appropriate kinds of infrastructure, with the appropriate access by the population. The dire need for such access is clearly evident in the case of India, where the severe shortfall in infrastructure expenditure has prevented the country from reaping the benefits of a transition to a free-market economy. Macroeconomic stabilisation is also critical to the creation of a conducive and stable environment for consumption and investment spending. This may take the form of appropriate fiscal or monetary stances as well as exchange rate intervention. The Singapore government adopts an exchange-rate-centred monetary policy that allows for a gradual and modest appreciation of the domestic currency, which effectively allows the government to mitigate the onset of inflation pressures via AD and AS channels. This has helped to keep inflation rates relatively low and achieving price stability is fundamental to Singapore's reliance on exports and foreign investment as sources of growth. To counter the effects of rising income disparities and the resulting impact on growth, governments also have to intervene with the provision of a social safety net as well as the implementation of policies to redistribute income.</p>	
L2	An answer that uses appropriate analysis to explain the role of free-market policies and government intervention in achieving economic growth and low unemployment.	6-9
L1	An answer that merely describes the role of free-market policies and government intervention in achieving economic growth and low unemployment.	3-5
L1	An answer that demonstrates some knowledge of free market policies and government intervention.	1-2
<p>In addition, up to 3 further marks for valid evaluative comment. This may be to focus on the stages of economic growth and development a country is in, prevailing economic conditions and particular needs or unique circumstances of a country.</p>		

	<p>It is a fact recognised by many countries that it would be a huge mistake to think that any one country can take a blanket approach in pursuing free-market policies or government intervention. The approach taken by a country should be tailored to its economic needs and circumstances. It is likely that less developed countries or low income economies like India stand to benefit more from policies that are more interventionist in nature, provided since these countries are more likely to suffer from a lack of well-established institutions and education or healthcare systems as well as infrastructure support. As the country progresses to the next stage of growth, the government can play a lesser role and give fuller reign to market forces.</p>	
--	--	--