INTERNATIONAL ADVANCED LEVEL

ECONOMICS

SAMPLE ASSESSMENT MATERIALS

Pearson Edexcel International Advanced Subsidiary in Economics (XEC11)
Pearson Edexcel International Advanced Level in Economics (YEC11)
First teaching September 2018
First examination from January 2019
First certification from August 2019 (International Advanced Subsidiary) and August 2020 (International Advanced Level)
Issue 2
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ISBN 978 1 446 94955 9
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Summary of changes made between previous issue and this current issue | Page number
--- | ---
The marks for Level 3 in the ‘Evaluation’ part of Question 13 for Units 1 and 2 have been corrected to ‘7-8’ in the mark scheme. | 41, 80
The marks for Level 3 in the ‘Evaluation’ part of Questions 8, 9 and 10 for Unit 3 have been corrected to ‘7-8’ in the mark scheme. | 114, 116, 118
The marks for Questions 7(c) and 7(d) in Unit 4 have been corrected to 8 and 6 respectively. | 124, 126,127
The marks for Level 3 in the ‘Evaluation’ part of Questions 8, 9 and 10 for Unit 4 have been corrected to ‘7-8’ in the mark scheme. | 152, 154, 156

This document is Issue 2. We will inform centres of any changes to this issue. The latest issue can be found on the Pearson website: qualifications.pearson.com
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Introduction

The Pearson Edexcel International Advanced Subsidiary in Economics and the Pearson Edexcel International Advanced Level in Economics are part of a suite of International Advanced Level qualifications offered by Pearson.

These sample assessment materials have been developed to support these qualifications and will be used as the benchmark to develop the assessment students will take.
General marking guidance

- All candidates must receive the same treatment. Examiners must mark the last candidate in exactly the same way as they mark the first.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than be penalised for omissions.
- Examiners should mark according to the mark scheme – not according to their perception of where the grade boundaries may lie.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate’s response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification/indicative content will not be exhaustive. However different examples of responses will be provided at standardisation.
- When examiners are in doubt regarding the application of the mark scheme to a candidate’s response, a senior examiner must be consulted before a mark is given.
- Crossed-out work should be marked unless the candidate has replaced it with an alternative response.

Marking guidance for levels based mark schemes

How to award marks
The indicative content provides examples of how students will meet each skill assessed in the question. The levels descriptors and indicative content reflect the relative weighting of each skill within each mark band.

Finding the right level
The first stage is to decide which level the answer should be placed in. To do this, use a ‘best-fit’ approach, deciding which level most closely describes the quality of the answer. Answers can display characteristics from more than one level, and where this happens markers must use the guidance below and their professional judgement to decide which level is most appropriate.

Placing a mark within a level
After a level has been decided on, the next stage is to decide on the mark within the level. The instructions below tell you how to reward responses within a level. However, where a level has specific guidance about how to place an answer within a level, always follow that guidance. Statements relating to the treatment of students who do not fully meet the requirements of the question are also shown in the indicative content section of each levels based mark scheme. These statements should be considered alongside the levels descriptors.
Markers should be prepared to use the full range of marks available in a level and not restrict marks to the middle. Markers should start at the middle of the level (or the upper-middle mark if there is an even number of marks) and then move the mark up or down to find the best mark. To do this, they should take into account how far the answer meets the requirements of the level:

- If it meets the requirements fully, markers should be prepared to award full marks within the level. The top mark in the level is used for answers that are as good as can realistically be expected within that level.
- If it only barely meets the requirements of the level, markers should consider awarding marks at the bottom of the level. The bottom mark in the level is used for answers that are the weakest that can be expected within that level.
- The middle marks of the level are used for answers that have a reasonable match to the descriptor. This might represent a balance between some characteristics of the level that are fully met and others that are only barely met.
Markers should be prepared to use the full range of marks available in a level and not restrict marks to the middle. Markers should start at the middle of the level (or the upper-middle mark if there is an even number of marks) and then move the mark up or down to find the best mark. To do this, they should take into account how far the answer meets the requirements of the level:

- If it meets the requirements fully, markers should be prepared to award full marks within the level. The top mark in the level is used for answers that are as good as can realistically be expected within that level.
- If it only barely meets the requirements of the level, markers should consider awarding marks at the bottom of the level. The bottom mark in the level is used for answers that are the weakest that can be expected within that level.
- The middle marks of the level are used for answers that have a reasonable match to the descriptor. This might represent a balance between some characteristics of the level that are fully met and others that are only barely met.

Instructions

- Use black ink or ball-point pen.
- Fill in the boxes at the top of this page with your name, centre number and candidate number.
- Answer ALL questions in Sections A, B and C.
- Answer ONE question in Section D.
- Answer the questions in the spaces provided – there may be more space than you need.

Information

- The total mark for this paper is 80.
- The marks for each question are shown in brackets – use this as a guide as to how much time to spend on each question.
- Candidates may use any calculator permitted by Pearson regulations.

Advice

- Read each question carefully before you start to answer it.
- Check your answers if you have time at the end.
SECTION A

Answer ALL questions in this section.

Questions must be answered with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

1  Statement 1: Countries should impose indirect taxes of 20% on sugary drinks.

Statement 2: 39% of adults worldwide were overweight in 2014. 11% of men and 15% of women were classified as obese.

Which one of the following best describes the two statements above?

☐ A Both statements are normative.
☐ B Statement 1 is normative and statement 2 is positive.
☐ C Both statements are positive.
☐ D Statement 1 is positive and statement 2 is normative.

(Total for Question 1 = 1 mark)

2  Which one of the following is an example of market failure?

☐ A The price of a commodity falling in response to falling demand
☐ B A tradeable pollution permit scheme aimed at reducing external costs
☐ C A market bubble caused by speculators, which leads to house prices rising
☐ D Excessive administrative costs resulting from the introduction of regulation

(Total for Question 2 = 1 mark)

3  In the UK, gas and electricity customers could save over £300 by moving to a different supplier. However, 70% of customers have never switched gas and electricity suppliers.

Which one of the following explains this behaviour?

☐ A Customers being good at computation
☐ B Customers maximising utility
☐ C Customers not feeling valued by current suppliers
☐ D Customers exhibiting habitual behaviour

(Total for Question 3 = 1 mark)
The diagram shows an economy’s production possibility frontier.

Which one of the following movements has an opportunity costs of 30 capital goods?

- **A** U to V
- **B** V to Y
- **C** W to Z
- **D** Y to Z

(Total for Question 4 = 1 mark)

5. The price of a litre of rapeseed oil increased by 7% in August 2016. Over the same period the quantity demanded of rapeseed oil decreased by 5% and the quantity demanded of sunflower oil increased by 3%.

**Ceteris paribus**, the cross-elasticity of demand for sunflower oil following a price change in rapeseed oil is equal to:

- **A** 0.43
- **B** 0.71
- **C** 1.40
- **D** 2.33

(Total for Question 5 = 1 mark)
The table below shows the estimated price elasticity of demand for various food items in the USA.

<table>
<thead>
<tr>
<th>Food item</th>
<th>Estimates of price elasticity of demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheese</td>
<td>-0.70</td>
</tr>
<tr>
<td>Ice cream</td>
<td>-0.23</td>
</tr>
<tr>
<td>Milk</td>
<td>-0.10</td>
</tr>
<tr>
<td>Other dairy products</td>
<td>-1.04</td>
</tr>
</tbody>
</table>

(Source: http://www.ers.usda.gov/media/875267/err139.pdf)

Which one of the following can be deduced from the table?

- A Cheese is an inferior good.
- B Ice cream has perfectly price inelastic demand.
- C An increase in the price of milk will cause a less than proportionate decrease in quantity demanded.
- D A decrease in the price of other dairy products will cause a more than proportional decrease in quantity demanded.

(Total for Question 6 = 1 mark)
SECTION B

Answer ALL questions in this section in the space provided.

7 To support the income of rice farmers, the Indian government introduced a guaranteed minimum price in 2016.

Draw a diagram to illustrate the impact of the introduction of the minimum price on the market for rice.

(Total for Question 7 = 4 marks)
In the European Union, if a bank fails and has to be closed down, an individual’s deposits are guaranteed up to €100 000 by the individual’s government.

With reference to the market for banking, explain what is meant by the term ‘moral hazard’.

(Total for Question 8 = 4 marks)
9 In 2016 the Regional Public Goods Initiative provided grants of $9.45 million to fund public goods across Latin America and the Caribbean.

Explain why governments have to fund the provision of public goods.

(Total for Question 9 = 4 marks)
10 The table below shows the gross weekly earnings for Canadian workers and the quantity of international passenger flights made by Canadians in 2014 and 2015.

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gross weekly earnings</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(income)</td>
<td>$935.33</td>
<td>$952.11</td>
</tr>
<tr>
<td><strong>Quantity of international passenger flights</strong></td>
<td>51 899 308</td>
<td>53 894 326</td>
</tr>
</tbody>
</table>

(Sources: http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/labr79-eng.htm and http://www.statcan.gc.ca/pub/51-203-x/2015000/t001-eng.htm)

Using the data in the table, calculate the income elasticity of demand for passenger flights in Canada. Show your workings.

(Total for Question 10 = 4 marks)
11 Between 2010 and 2014, the price of US almonds increased from $1.79 to $3.19. The quantity of almonds supplied increased from 1 461 664 000 lbs to 1 950 018 000 lbs.

Explain the likely price elasticity of supply between 2010 and 2014. Illustrate your answer with a diagram.

(Total for Question 11 = 4 marks)

TOTAL FOR SECTION B = 20 MARKS
SECTION C

Study Figures 1 and 2 and Extracts A and B in the Source booklet before answering Question 12.

Write your answers in the space provided on the following pages.

12 (a) Define the term ‘renewable resource’.

(b) Explain what is meant by the term ‘cross elasticity of demand’. Refer to the likely relationship between the price of coal and the demand for renewable energy resources in your answer.

(c) With reference to Figure 1 and Extract A, analyse one reason why in October 2016 the price of coal ‘reached its highest level since the start of the year’ (Extract A, lines 5-6).

Illustrate your answer with a supply and demand diagram.

(d) With reference to Extract B, examine the likely impact of the introduction of an indirect tax on coal on the market for electricity generation.

(e) With reference to Extract B, discuss the external costs of generating electricity using coal.

Illustrate your answer with an appropriate diagram.
12 (a) Define the term ‘renewable resource’.

(b) Explain what is meant by the term ‘cross elasticity of demand’. Refer to the likely relationship between the price of coal and the demand for renewable energy resources in your answer.
(c) With reference to Figure 1 and Extract A, analyse one reason why in October 2016 the price of coal ‘reached its highest level since the start of the year’ (Extract A, lines 5-6).

Illustrate your answer with a supply and demand diagram.
(d) With reference to Extract B, examine the likely impact of the introduction of an indirect tax on coal on the market for electricity generation.
(e) With reference to Extract B, discuss the external costs of generating electricity using coal.

Illustrate your answer with an appropriate diagram.
(e) With reference to Extract B, discuss the external costs of generating electricity using coal.
Evaluate the economic effects of subsidies paid to businesses such as Airbus.

OR

Evaluate the private benefits and external benefits of education.

'UNICEF identified that in Nigeria 30% of children aged 6-11 do not go to school and subsidies Europe’s Airbus by up to $22 billion. Boeing argues that this is unfair. Many children lack a basic education.

(Total for Question 12 = 34 marks)

TOTAL FOR SECTION C = 34 MARKS
SECTION D

Answer ONE question from this section.
Write your answer in the space provided.

EITHER

13 ‘UNICEF identified that in Nigeria 30% of children aged 6-11 do not go to school and that many children lack a basic education.’

Evaluate the private benefits and external benefits of education.

(Total for Question 13 = 20 marks)

OR

14 ‘The American plane manufacturer Boeing, believes that the European Union is subsidising Europe’s Airbus by up to $22 billion. Boeing argues that this is unfair.’

Evaluate the economic effects of subsidies paid to businesses such as Airbus.

(Total for Question 14 = 20 marks)
Indicate which question you are answering by marking a cross in the box ✗. If you change your mind, put a line through the box ✗ and then indicate your new question with a cross ✗.

Chosen question number:   Question 13 □   Question 14 □

Write your answer here:

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Sources for use with Section C.

The market for coal

Figure 1 – Price of thermal coal, $US per metric tonne, October 2011 to October 2016

Extract A - The price of thermal coal rises

Thermal coal is a type of coal used in generating electricity. In April 2016, China introduced regulations to reduce the production of coal because there was oversupply in the market. The regulations limited the number of days that miners could work. The costs of transporting coal also rose. In October 2016, the price of thermal coal reached its highest level since the start of the year.
Extract A – The price of thermal coal rises

Thermal coal is a type of coal used in generating electricity. In April 2016, China introduced regulations to reduce the production of coal because there was oversupply in the market. The regulations limited the number of days that miners could work. The costs of transporting coal also rose. In October 2016, the price of thermal coal reached its highest level since the start of the year.

Figure 1 – Price of thermal coal, $US per metric tonne, October 2011 to October 2016

Extract B – Coal power generation in the USA

Coal used in generating electricity is the largest source of carbon dioxide (CO₂) emissions in the USA. In 2011, coal power stations emitted a total of 1.7 billion tonnes of CO₂. CO₂ emissions are a major cause of global warming, which could melt the polar ice caps and result in more extreme weather events. This would mean more flooding and damage to property.

Coal power stations are a significant source of sulphur dioxide (SO₂) and nitrogen oxides (NOx) pollution in the USA. These affect people's health, as they can damage lungs. They also cause acid rain, which damages crops, forests and soils, and affects lakes and streams.

Coal power stations are responsible for more than 50% of human-caused emissions of mercury, a toxic heavy metal that causes brain damage and heart problems. Mercury leaking into lakes kills fish and other wildlife.

Coal emissions can be significantly reduced with the use of technology. However, this is expensive and so few coal plants use it.

In November 2016, voters in Washington State, USA, voted in a referendum on whether to introduce an indirect tax on coal. The aim of such a tax would be to reduce emissions that contribute to climate change. The revenue raised could fund developments of cleaner renewable energy. At the same time, it would give energy producers the incentive to reduce the use of coal. However, some argue it could harm the poor if it drives up energy prices. Energy companies are concerned about the added costs which could lead to a reduction in production and employment.
Acknowledgements

Figure 1 based on data taken from http://www.indexmundi.com/Commodities/?commodity=coal-australian&months=60; Extract A adapted from ‘Physical coal prices surge to highest since start of 2014’ by Henning Gloystein and Nina Chestney, Oct 4 2016, http://www.reuters.com/article/us-coal-markets-idUSKCN1240C9; Figure 2 based on data taken from: http://www.eia.gov/energyexplained/index.cfm?page=us_energy_home; Extract B adapted from http://www.ucsusa.org/clean_energy/coalvswind/c02c.html#.V_6xwSS2Ukw
## Unit 1 – Mark scheme

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<th>Quantitative skills assessed</th>
<th>Answer</th>
<th>Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>–</td>
<td>B</td>
<td>(1)</td>
</tr>
<tr>
<td>2</td>
<td>–</td>
<td>C</td>
<td>(1)</td>
</tr>
<tr>
<td>3</td>
<td>–</td>
<td>D</td>
<td>(1)</td>
</tr>
<tr>
<td>4</td>
<td>QS9: Interpret, apply and analyse information in written, graphical and tabular forms</td>
<td>B</td>
<td>(1)</td>
</tr>
<tr>
<td>5</td>
<td>QS8: Make and interpret calculations of elasticity</td>
<td>A</td>
<td>(1)</td>
</tr>
<tr>
<td>6</td>
<td>QS8: Make and interpret calculations of elasticity</td>
<td>C</td>
<td>(1)</td>
</tr>
</tbody>
</table>

### Question 7

**Knowledge 1, Application 3**

Quantitative skills assessed:
- **QS4**: Construct and interpret a range of standard graphical forms
- **QS9**: Interpret, apply and analyse information in written, graphical and tabular forms.

**Knowledge**
- 1 mark for drawing original supply and demand (they do not have to include market equilibrium).

**Application**
- Up to 3 marks for the following information included on diagram:
  - 1 mark for showing quantity demanded and quantity supplied with reference to rice
  - 1 mark for identifying excess supply / surplus of rice
  - 1 mark for drawing minimum price above market equilibrium.

![Diagram of supply and demand for rice](attachment:image.png)
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
<th>Mark</th>
</tr>
</thead>
</table>
| 8        | **Knowledge 2, Application 2**  
Knowledge  
Up to 2 marks for defining ‘moral hazard’, e.g.  
- It occurs where an economic agent makes a risky decision *(1)* knowing that, if losses are made, the burden will be borne by another party *(1)*.  
- Where firms act immorally due to incentives that exist in the market *(1)*.  
Application  
Up to 2 marks for applying to the banking sector, e.g.:  
- Banks know that if they go bankrupt, their customers’ deposits will be protected up to €100 000 *(1)*, so may make more risky investments as they know customers would have most of their money protected *(1)*. | *(4)*** |
| 9        | **Knowledge 1, Application 1, Analysis 2**  
Knowledge  
Up to 1 mark for defining ‘public goods’, e.g.:  
- Public goods are non-excludable and non-rival *(1)*.  
Analysis  
Up to 2 marks for explaining why governments have to provide them, e.g.:  
- Firms will not provide public goods as they will not be able to generate a profit *(1)*, so governments have to provide them *(1)*.  
- Firms profit maximise and because customers will use the goods without paying (the free rider problem) *(1)* the firms will not be able to generate profits and therefore firms will not provide the goods *(1)*.  
Application  
Up to 1 mark for applying this to examples of public goods, e.g.:  
- For example street lighting *(1)* | *(4)*** |
Knowledge 1, Application 3
Quantitative skills assessed:

QS8: Make and interpret calculations of elasticity.

Knowledge

EITHER
1 mark for the formula for income elasticity of demand:
\[ \frac{\text{% change in quantity demanded}}{\text{% change in income}} \] (1)

OR
1 mark for identifying that the good is a normal good:
• International flights are normal goods as rising income has led to rising quantity demanded (1).

Application

Up to 3 marks for calculations:
• change in quantity:
  \[ 53\,894\,326 - 51\,899\,308 = 1\,955\,018 \]
  \[ \frac{1\,955\,018}{51\,899\,308 \times 100} = 3.77\% \] (1)

• change in income:
  \[ 952.11 - 935.33 = 16.78 \]
  \[ \frac{16.78}{935.33 \times 100} = 1.79\% \] (1)

• YED
  \[ \frac{3.77}{1.79} = 2.11 \] (1)

NB: if correct answer (2.11) is given, award full marks regardless of working.
### Question 11

#### Knowledge 1, Application 1, Analysis 2

Quantitative skills assessed:

- **QS4**: Construct and interpret a range of standard graphical forms
- **QS8**: Make and interpret calculations of elasticity.

**Knowledge**

1 mark for defining price elasticity of supply:

\[
\text{Price Elasticity of Supply (PES)} = \frac{\% \text{ change in quantity supplied}}{\% \text{ change in price}}
\]

OR

1 mark for defining elastic or inelastic supply:

- Elastic supply is where the PES is greater than 1
- Inelastic supply is where the PES is less than 1

**Application**

1 mark for the following diagram, showing supply is inelastic:

![Supply Diagram](image)

**Analysis**

Up to 2 marks for explaining the change:

- The price elasticity of supply is price inelastic.
- The rise in quantity of 33.41% is greater than the price rises 78.21%.
- The price elasticity of supply will be 33.41/78.21 = 0.43.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
<th>Mark</th>
</tr>
</thead>
</table>
| 12 (a)   | Knowledge 2  
Up to 2 marks for defining a ‘renewable resource’, e.g.:  
• A resource that can be used again and again (1).  
• Where consumption does not deplete the supply of a product (1).  
• A good that replenishes after use (1). | (2) |
| 12 (b)   | Knowledge 2 Application 2  
Knowledge  
Up to 2 marks for definitions of cross-price elasticity of demand (XED):  
• The responsiveness of quantity demanded for Product X (1) to a change in the price of Product Y (1)  
OR  
• Formula for XED:  
\[
\text{\% change in quantity demanded of good X} \div \text{\% change in price of good Y}  
\]  
Application  
Up to 2 marks for application to energy production, e.g.:  
• Coal and renewable energy resources are substitutes (1) and have a positive cross-elasticity of demand (1).  
• As the price of coal rises, the quantity demanded of renewable resources will rise (1) making them substitutes (1). | (4) |
**Question 12 (c)**

**Knowledge 2, Application 2, Analysis 2**

Quantitative skills assessed:
- **QS4**: Construct and interpret a range of standard graphical forms
- **QS9**: Interpret, apply and analyse information in written, graphical and tabular forms.

**Knowledge**

Up to 2 marks for the diagram showing:
- Original supply, demand and equilibrium (1)
- Final equilibrium showing higher price (1).

**Analysis**

Up to 2 marks for development of how reason(s) leads to higher prices, e.g.:
- Regulations / higher transport costs lead to higher total production costs for the firm (1), making production less profitable, leading to lower supply (1).
- Alternative sources of energy production may become relatively more profitable, so firms switch production (1).

**Application**

Up to 2 marks:
- 1 mark for interpreting data from Figure 1:
  - showing a change in price / China introduced regulations / regulation limited the number of days that miners could work / higher cost of transporting coal (1).

PLUS 1 mark for a diagram showing leftward shift in supply (1).
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
<th>Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>12(d)</td>
<td>Knowledge 2, Application 2, Analysis 2, Evaluation 2</td>
<td></td>
</tr>
<tr>
<td><strong>Knowledge</strong></td>
<td>Up to 2 marks for knowledge of indirect taxation, e.g.:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Definition of indirect taxation: expenditure tax / tax paid through third party / charge on consumption (1).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Adds to costs of production (1).</td>
<td></td>
</tr>
<tr>
<td><strong>Analysis</strong></td>
<td>Up to 2 marks for linked explanations showing the impact of these indirect taxes, e.g.:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Reduction in supply, leading to higher prices for coal powered electricity (1+1).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The indirect tax will result in a lower quantity, which reduces the external costs of coal / reducing the welfare losses experienced by third parties (1+1).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The indirect tax will see an incidence of the tax where part of the tax is borne by consumers who have to pay more and producers who receive less than the market equilibrium (1+1).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The contraction of demand leads to consumer and producer surplus falling (1+1).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• May make coal production less profitable / unprofitable (1).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[The above may be drawn diagrammatically.]</td>
<td></td>
</tr>
<tr>
<td><strong>Application</strong></td>
<td>Up to 2 marks for reference to the given sources, e.g.:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• There will be ‘revenue raised’ for government, according to Extract 2 (1).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The tax revenue can ‘fund developments of cleaner renewable energy’, as suggested in final paragraph of Extract 2 (1).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Firms will have an ‘incentive to reduce the use of coal’ (1).</td>
<td></td>
</tr>
<tr>
<td><strong>Evaluation</strong></td>
<td>Up to 2 marks for evaluative comments, e.g.:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• If energy prices rise, it may harm the poor, making energy unaffordable – link to fuel poverty (1+1).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The jobs of coal miners and those in coal powered energy production would be at risk (1+1).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Magnitude: it depends on size of the tax – if only a small change, then it will have little impact (1+1).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Incidence of the tax depends on elasticities of supply and demand (1+1).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Measurement of the ideal tax is difficult to determine (1+1).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• In the long-term, it is likely to have an impact on decisions as to which power plants to use, e.g. more renewable-energy plants may be built (1+1).</td>
<td>(8)</td>
</tr>
</tbody>
</table>
**Question 12(e)**

**Indicative content guidance**

Answers must be credited by using the level descriptors (below) in line with the general marking guidance.

The indicative content below exemplifies some of the points that candidates may make but this does not imply that any of these must be included. Other relevant points must also be credited.

**Quantitative skills assessed**

- **QS4:** Construct and interpret a range of standard graphical forms
- **QS9:** Interpret, apply and analyse information in written, graphical and tabular forms.

**Knowledge, Application and Analysis (8 marks) – indicative content**

- **Definition of ‘external costs’** – they are costs incurred by third parties / negative impacts on those not involved in transaction.
- **External costs mean marginal social costs are greater than marginal private costs.**
- **Diagram of welfare loss triangle caused by over consumption:**

![Welfare Loss Triangle](image)

- **External costs to property owners** – it was the largest source of carbon dioxide (CO2) emissions in the USA. It emitted a total of 1.7 billion tonnes of CO2, leading to global warming, melting polar ice caps and more severe weather. Third parties will be affected by flooding, which may damage properties. Those affected may have the costs of rebuilding or repairing homes.
- **External costs to agriculture** – it causes acid rain, which damages crops, forests and soils, and affects lakes and streams. This has an impact on farmers as their production quality and quantity is negatively affected. This may result in lower revenues and profits.
- **External costs to health services and individuals** – mercury, a toxic heavy metal that causes brain damage and heart problems adds costs to health services to treat. / Particulate matter is also known as soot and can cause chronic bronchitis, aggravated asthma, and premature death – this adds costs to health services. / Soot also causes smog, which makes visibility
difficult for pilots and pedestrians, increasing the risk of accidents that costs health services.
- External costs to fishermen – mercury leaking into lakes kills fish and other wildlife. This adds costs to fishermen and biodiversity. It also causes acid rain, which affects lakes and streams, which has an impact on fishermen as the quantity and quality of fish caught will worsen.

<table>
<thead>
<tr>
<th>Level</th>
<th>Mark</th>
<th>Descriptor</th>
</tr>
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<tbody>
<tr>
<td>0</td>
<td>No rewardable material</td>
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</tr>
<tr>
<td>Level 1</td>
<td>1–3</td>
<td>Displays isolated, superficial or imprecise knowledge and understanding of economic terms, principles, concepts, theories and models. Use of generic material or irrelevant information or inappropriate examples. Descriptive approach, which has no chains of reasoning.</td>
</tr>
<tr>
<td>Level 2</td>
<td>4–6</td>
<td>Displays elements of knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to apply knowledge and understanding to some elements of the question. Some evidence and contextual references are evident in the answer. Chains of reasoning in terms of cause and/or consequence are evident but they may not be developed fully or some stages are omitted.</td>
</tr>
<tr>
<td>Level 3</td>
<td>7–8</td>
<td>Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to link knowledge and understanding in context using relevant examples which are fully integrated to address the broad elements of the question. Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence.</td>
</tr>
</tbody>
</table>

**Evaluation (6 marks) – indicative content**
- The technology is available to reduce these negative impact.
- Magnitude of external costs is large at it is largest contributor, e.g. to CO2.
- Measurement – it is hard to measures the size of these external costs.
- Benefits of coal production – it helps keep price lower so accessible to poor / maintains employment for coal miners and those in coal-fired power stations.
- Short-term effects are harder to see but long-term accumulation is a big problem.

<table>
<thead>
<tr>
<th>Level</th>
<th>Mark</th>
<th>Descriptor</th>
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</thead>
<tbody>
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<td>No rewardable material</td>
<td></td>
</tr>
<tr>
<td>Level 1</td>
<td>1–2</td>
<td>Identification of generic evaluative comments. No supporting evidence/reference to context. No evidence of a logical chain of reasoning.</td>
</tr>
<tr>
<td>Level 2</td>
<td>3–4</td>
<td>Evidence of evaluation of alternative approaches. Some supporting evidence/reference to context. Evaluation is supported by a partially-developed chain of reasoning.</td>
</tr>
<tr>
<td>Level 3</td>
<td>5–6</td>
<td>Evaluation recognises different viewpoints and/or is critical of the evidence. Appropriate reference to evidence/context. Evaluation is supported by a logical chain of reasoning.</td>
</tr>
</tbody>
</table>
Question 13

Indicative content guidance

Answers must be credited by using the level descriptors (below) in line with the general marking guidance.

The indicative content below exemplifies some of the points that candidates may make, but this does not imply that any of these must be included. Other relevant points must also be credited.

Knowledge, application and analysis (12 marks) – indicative content

- Private benefits – there are benefits to the individual who is consuming education.
- It may result in higher skill levels, enabling them to earn more for employment.
- Higher income over their lifetime enables them to have a higher standard of living.
- They are able to make better decisions as they are more informed, meaning they benefit from higher returns.
- They are more likely to be able to choose the job they do, enabling them to get better satisfaction in work.
- Education has external benefits – benefits to third parties not considered by those in the transaction.
- When someone is educated and becomes a doctor, the people they treat benefit from their education as they receive the right treatment.
- When someone is educated and becomes a teacher, students may benefit from better-quality education.
- Employers will benefit from higher-skilled workers and this will raise productivity.
- A diagram for external benefits – clearly identifying:
  - MSB>MPB
  - Market equilibrium and social optimum identified
  - Welfare loss area identified.
- There is under-consumption as people do not consider these benefits to third parties.

<table>
<thead>
<tr>
<th>Level</th>
<th>Mark</th>
<th>Descriptor</th>
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</thead>
<tbody>
<tr>
<td>Level 0</td>
<td>0</td>
<td>No rewardable material.</td>
</tr>
<tr>
<td>Level 1</td>
<td>1–3</td>
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</tr>
<tr>
<td>Level 2</td>
<td>4–6</td>
<td>Displays elements of knowledge and understanding of economic terms, principles, concepts, theories and models. Limited application of knowledge and understanding to economic problems in context. A narrow response or superficial, only two-stage chains of reasoning in terms of cause and/or consequence.</td>
</tr>
<tr>
<td>Level</td>
<td>Mark</td>
<td>Descriptor</td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
<td>------------</td>
</tr>
<tr>
<td>Level 3</td>
<td>7–9</td>
<td>Demonstrates accurate knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to apply knowledge and understanding to some elements of the question. Some evidence and contextual references are evident in the answer. Analysis is clear and coherent. Chains of reasoning in terms of cause and/or consequence are evident but they may not be developed fully or some stages are omitted.</td>
</tr>
<tr>
<td>Level 4</td>
<td>10–12</td>
<td>Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to link knowledge and understanding in context, using appropriate examples which are fully integrated to address the broad elements of the question. Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence.</td>
</tr>
</tbody>
</table>

**Evaluation (8 marks) – indicative content**
- Measurement problem – it is difficult to measure the size of external benefits.
- Magnitude – depends on quality of education as to the size of any private or external benefits.
- Time frame – education is long term, so private and external benefits occur over a long period of time.
- Some of those receiving the best education may leave their own countries to seek better salaries abroad.
- It depends on what education is received – if in the wrong areas then there is little benefit.
- Curriculum design is important.

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<td>Level 3</td>
<td>7–8</td>
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Indicative content guidance
Answers must be credited by using the level descriptors (below) in line with the general marking guidance.
The indicative content below exemplifies some of the points that candidates may make but this does not imply that any of these must be included. Other relevant points must also be credited.

Knowledge, application and analysis (12 marks) – indicative content
- Subsidies – these are cash grants to encourage production.
- This lowers production costs for firms.
- It increases supply of planes, lowering the price and increasing the quantity of planes for firms receiving subsidy.
- It makes Airbus’s planes more affordable to airlines.
- Airbus can use the subsidy to invest to improve quality of planes.
- The Airbus subsidy protects employment across Europe.
- Subsidy costs European governments / EU.
- Answers may make reference to there being an incidence of subsidy.
- Accept a diagram drawn to show how Airbus is affected.
- There will be a negative impact on competitors not in receipt of subsidy.
- Boeing will suffer if not provided with subsidies.
- Boeing may need to lower prices to compete, which might lower its profit margins.
- Reducing profits means there is less available for investment by Boeing, making it more difficult to compete with Airbus.
- Boeing achieving lower revenue and profit could affect employment in America.

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</table>
### Evaluation (8 marks) – indicative content
- **Measurement problem** – is all the $22m a subsidy?
- **Magnitude** – depends on size of subsidy as to whether it will disadvantage competitors.
- **Time frame** – if it is a one off payment, then less of an issue but if long term then it is more unfair.
- It depends on when and how the payments are received.
- It depends if competitors get subsidies, too.

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<tbody>
<tr>
<td><strong>Level 4</strong></td>
<td>10–12</td>
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</tr>
<tr>
<td><strong>Level 1</strong></td>
<td>1–3</td>
<td>Identification of generic evaluative comments. No supporting evidence/reference to context. No evidence of a logical chain of reasoning.</td>
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<tr>
<td><strong>Level 2</strong></td>
<td>4–6</td>
<td>Evidence of evaluation of alternative approaches. Some supporting evidence/reference to context. Evaluation is supported by a partially-developed chain of reasoning.</td>
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<tr>
<td><strong>Level 3</strong></td>
<td>7–8</td>
<td>Evaluation recognises different viewpoints and/or is critical of the evidence, leading to an informed judgement. Appropriate reference to evidence/context. Evaluation is supported by a logical chain of reasoning.</td>
</tr>
</tbody>
</table>
Instructions

• Use black ink or ball-point pen.
• Fill in the boxes at the top of this page with your name, centre number and candidate number.
• Answer ALL questions in Sections A, B and C.
• Answer ONE question in Section D.
• Answer the questions in the spaces provided – there may be more space than you need.

Information

• The total mark for this paper is 80.
• The marks for each question are shown in brackets – use this as a guide as to how much time to spend on each question.
• Candidates may use any calculator permitted by Pearson regulations.

Advice

• Read each question carefully before you start to answer it.
• Check your answers if you have time at the end.
SECTION A

Answer ALL questions in this section.

Questions must be answered with a cross in a box ✗. If you change your mind about an answer, put a line through the box ✗ and then mark your new answer with a cross ✗.

1 Which one of the following is a withdrawal from the circular flow of income?

☐ A  Investment
☐ B  Exports
☐ C  Imports
☐ D  Government expenditure

(Total for Question 1 = 1 mark)

2 In July 2016, the unemployment rate in Greece was 23.2%.

Which one of the following is most likely to reduce unemployment in Greece?

☐ A  An increase in interest rates
☐ B  An increase in indirect taxation
☐ C  An increase in direct taxation
☐ D  An increase in government spending

(Total for Question 2 = 1 mark)

3 The World Bank calculates a ‘PPP-adjusted level of GDP’ for different countries.

What is compared to calculate Purchasing Power Parity (PPP)?

☐ A  The price of a basket of comparable goods and services in different countries
☐ B  The value of the currency of one country to the US dollar
☐ C  Life expectancy and educational attainment in different countries
☐ D  Inflation rates in different countries over a given time period

(Total for Question 3 = 1 mark)
The Business Confidence Indicator is a measure of how confident businesses are about future sales.

Which one the following is most likely to result from the change in business confidence in Chile between 2010 and 2015?

<table>
<thead>
<tr>
<th>Real output</th>
<th>Price level</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ A</td>
<td>Fall</td>
</tr>
<tr>
<td>□ B</td>
<td>Fall</td>
</tr>
<tr>
<td>□ C</td>
<td>Rise</td>
</tr>
<tr>
<td>□ D</td>
<td>Rise</td>
</tr>
</tbody>
</table>

(Total for Question 4 = 1 mark)
5. The chart shows the balance of trade between 2010 and 2015 for Lebanon.

![Chart showing balance of trade between 2010 and 2015 for Lebanon.](image)


Which one of the following can be deduced from the chart?

- A. Lebanon’s fiscal deficit was $12.75bn in 2013.
- B. Lebanon’s net trade balance was -$10.77bn in 2015.
- C. Lebanon’s net trade balance worsened each year between 2010 and 2015.
- D. Lebanon had a fiscal deficit in each year between 2010 and 2015.

(Total for Question 5 = 1 mark)

6. Donald Trump, the President of the USA, has proposed a reduction in the top rate of income tax from 39.6% to 33%.

What would be the effect of this change in the marginal rate of tax?

- A. It would decrease wealth.
- B. It would increase withdrawals.
- C. It would decrease the value of the multiplier.
- D. It would increase the value of the multiplier.

(Total for Question 6 = 1 mark)

TOTAL FOR SECTION A = 6 MARKS
SECTION B

Answer ALL questions in this section in the space provided.

7 In the UK, 34% of graduates who complete university find themselves working in lower-paid, non-graduate jobs. It has been estimated that 3.4 million people were working part-time because they could not find full-time work or because they wanted more hours in their contract.

With reference to the information above, explain the term ‘underemployment’.

(Total for Question 7 = 4 marks)
8 Until 2017, Hungary’s tax on company profits was 10% up to $1.74 million. Profits above this were taxed at 19%. From 2017, the government reduced the rate to 9% on all business profits.

Draw a short-run AS and AD diagram to show the effect of this reduction in tax on the price level and real output.

(Total for Question 8 = 4 marks)
9. In 2014, the Bank of England estimated the marginal propensity to consume of UK consumers was 0.5.

The UK government will spend £30 billion on improving railway services.

Using the information above, calculate the total increase in national income resulting from the £30 billion increase in investment.

(Total for Question 9 = 4 marks)
10 The Bank of Japan has used asset purchases to increase the money supply. Between November 2014 and April 2016, asset purchases equalled ¥7 trillion.

Explain how asset purchases will likely affect the price level.

(Total for Question 10 = 4 marks)
11 Between July 2015 and July 2016, Liberia’s currency, the Liberian dollar, fell by 8.2% against the US dollar.

   Explain the likely impact on Liberia’s net trade balance of this change in the exchange rate.

(Total for Question 11 = 4 marks)

TOTAL FOR SECTION B = 20 MARKS
SECTION C

Study Figures 1 and 2 and Extracts A and B in the Source booklet before answering Question 12. Write your answers in the space provided on the following pages.

12 (a) Define the term ‘base interest rate’ (Extract B, line 1).

(b) With reference to Figure 2, explain the term ‘disinflation’.

(c) With reference to Figure 1 and Extract A, analyse one cause of economic growth in India.

(d) With reference to the information provided, discuss the likely impact of ‘rapid economic growth’ (Extract A, line 2) on the Indian economy.

(e) With reference to Extract B, examine the likely economic impact on the Indian economy of the reduction in the base interest rate.
12 (a) Define the term ‘base interest rate’ (Extract B, line 1).

(b) With reference to Figure 2, explain the term ‘disinflation’.
(c) With reference to Figure 1 and Extract A, analyse one cause of economic growth in India.
(d) With reference to the information provided, discuss the likely impact of ‘rapid economic growth’ (Extract A, line 2) on the Indian economy.
(e) With reference to Extract B, examine the likely economic impact on the Indian economy of the reduction in the base interest rate.

(Total for Question 12 = 34 marks)

(Total for Section C = 34 marks)
SECTION D

Answer ONE question from this section.
Write your answer in the space provided.

EITHER

13 In 2016, the GDP of Argentina was forecast to contract by 2% and consumer price inflation was predicted to increase by 4%.

Evaluate supply-side policies that would help Argentina achieve economic growth without inflationary pressure.

(Total for Question 13 = 20 marks)

OR

14 ‘The availability of credit has a significant influence over the level of consumption.’

Evaluate this view that the availability of credit is the most important factor influencing consumption.

(Total for Question 14 = 20 marks)
Indicate which question you are answering by marking a cross in the box ☑. If you change your mind, put a line through the box ☒ and then indicate your new question with a cross ☑.

Chosen question number:  Question 13 ☐  Question 14 ☐

Write your answer here:
TOTAL FOR SECTION C = 20 MARKS
TOTAL FOR PAPER = 80 MARKS
Do not return this Source booklet with the question paper.
Sources for use with Section C.

The Indian economy

Figure 1 – Real GDP per capita growth (annual %), 2010-2015

Figure 2 – The rate of inflation, as measured by the consumer price index (annual %), 2010-2015

Extract A – India's rapid economic growth

India's economic growth rate has remained rapid while growth rates in China, Brazil and Russia have slowed. This rapid economic growth has been supported by public sector pay increases, an increase in the quantity of exports and growth in private sector investment.

India's economic growth will support continued improvements in the standard of living. Rural areas are benefiting from the agricultural sector performing well. Urban areas are benefiting from growth in the manufacturing and services sectors. The growth in GDP is helping both the poor and rich.

In 2012, the Government spent more than it earned through taxation, and had a budget deficit at 5.8% of GDP. Between 2012 and 2015 economic growth increased resulting in increased tax revenues. This helped reduce the size of the deficit to just 3.9% of GDP in 2015. With economic growth continuing into 2016, imports grew by 8.1% in October 2016. This contributed to an increase in the balance of trade deficit of 4.8%.

With rapid economic growth, some Indian cities are struggling with pollution. In November 2016, Delhi experienced such severe air pollution that the local government closed schools for three days and banned cars in the city.

Extract B – India's central bank cuts base interest rates

In November 2016, India's central bank cut its base interest rate from 6.5% to 6.25%. It decided to do so because of slowing global economic growth. This was the lowest base rate in India for more than five years. Historically, the Indian Central Bank aimed to achieve currency stability and economic growth.

India is one of the fastest growing economies in the world and its economy seems relatively sheltered from the slowdown affecting other countries in the region. These factors make it very attractive to foreign investors.

Global growth has been slowing more than anticipated through 2016 and investment has been low. Meanwhile, several risks have worsened the economic outlook, including the United Kingdom's decision to leave the European Union, problems in the banking sector in Europe, a Chinese slowdown and rising protectionism.
Extract A – India’s rapid economic growth

India’s economic growth rate has remained rapid while growth rates in China, Brazil and Russia have slowed. This rapid economic growth has been supported by public sector pay increases, an increase in the quantity of exports and growth in private sector investment.

India’s economic growth will support continued improvements in the standard of living. Rural areas are benefiting from the agricultural sector performing well. Urban areas are benefiting from growth in the manufacturing and services sectors. The growth in GDP is helping both the poor and rich.

In 2012, the Government spent more than it earned through taxation, and had a budget deficit at 5.8% of GDP. Between 2012 and 2015 economic growth increased resulting in increased tax revenues. This helped reduce the size of the deficit to just 3.9% of GDP in 2015. With economic growth continuing into 2016, imports grew by 8.1% in October 2016. This contributed to an increase in the balance of trade deficit of 4.8%.

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Global growth has been slowing more than anticipated through 2016 and investment has been low. Meanwhile, several risks have worsened the economic outlook, including the United Kingdom’s decision to leave the European Union, problems in the banking sector in Europe, a Chinese slowdown and rising protectionism.
Figure 1 based on data taken from http://databank.worldbank.org/data/reports.aspx?source=2&series=NY.GDP.CAP.KD.ZG&country;
# Unit 2 – Mark scheme

<table>
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<tr>
<th>Question</th>
<th>Quantitative skills assessed</th>
<th>Answer</th>
<th>Mark</th>
</tr>
</thead>
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<td>–</td>
<td>C</td>
<td>(1)</td>
</tr>
<tr>
<td>2</td>
<td>–</td>
<td>D</td>
<td>(1)</td>
</tr>
<tr>
<td>3</td>
<td>–</td>
<td>A</td>
<td>(1)</td>
</tr>
<tr>
<td>4</td>
<td>QS9: Interpret, apply and analyse information in written, graphical and tabular forms</td>
<td>B</td>
<td>(1)</td>
</tr>
<tr>
<td>5</td>
<td>QS4: Construct and interpret a range of standard graphical forms</td>
<td>B</td>
<td>(1)</td>
</tr>
<tr>
<td>6</td>
<td>QS1: Calculate, use and understand ratios and fractions</td>
<td>D</td>
<td>(1)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
<th>Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Knowledge 2, Application 2</td>
<td></td>
</tr>
</tbody>
</table>

**Knowledge**

Up to 2 marks for defining ‘underemployment’, e.g.:
- It occurs where people are in employment (1) but want to be working more hours or in a more skilled job (1).

**Application**

Up to 2 marks for applying to the UK, e.g.:
- In the UK, 34% of graduates who complete university find themselves working in lower paid non-graduate jobs (1).
- 3.4 million people were working part time because they could not find full-time work / wanted more hours in their contract (1).
- So although people are employed, they are unable to find a job with enough hours or the correct skills (1).
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
<th>Mark</th>
</tr>
</thead>
</table>
| 8        | **Knowledge 1, Application 3**  
Quantitative skills assessed:  
**QS9**: Interpret, apply and analyse information in written, graphical and tabular forms.  
**Knowledge**  
- 1 mark for drawing original AD and SRAS curves.  
**Application**  
- 1 mark for shift in SRAS.  
- 1 mark for shift in AD.  
- 1 mark for new equilibrium.  

![Graph](image)

NB Price may rise or fall depending on shift in AD and SRAS. (4)
<table>
<thead>
<tr>
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<th>Mark</th>
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</thead>
</table>
| **9**    | Knowledge 1, Application 3  
Quantitative skills assessed:  
**QS9**: Interpret, apply and analyse information in written, graphical and tabular forms.  
**Knowledge**  
1 mark for correct multiplier formula, e.g.:  
- Multiplier = $1/(1-MPC)$.  
**Application**  
Up to 3 marks for use of data in calculation, e.g.:  
- Multiplier = $1/0.5 = 2$ $(1)$  
- £30 billion $\times$ 2 $(1) = £60$ billion $(1)$. | (4) |
| **10**   | Knowledge 1, Application 1, Analysis 2  
**Knowledge**  
Up to 1 marks for defining asset purchasing, e.g.:  
- Purchase of government bonds/gilts/corporate bonds by a central bank $(1)$.  
**Analysis**  
Up to 2 marks for explaining the way it affects price level, e.g.:  
- This improves the availability of money for loans $(1)$ which helps stimulate consumption / investment $(1)$.  
- This stimulates consumption / investment $(1)$ which boosts Aggregate Demand and inflates prices $(1)$.  
**Application**  
Up to 1 mark for applying this to the context of Japan, e.g.:  
- Japan wanted to avoid deflation $(1)$ / wanted to stimulate the economy increase aggregate demand $(1)$ | (4) |
| **11**   | Knowledge 1, Application 1, Analysis 2  
**Application**  
1 mark for identifying that 8.2% fall is a depreciation.  
**Knowledge**  
1 mark for defining depreciation, e.g.:  
- A depreciation is where the value of one currency falls against another currency.  
**Analysis**  
Up to 2 marks for the impact on the net trade balance, e.g.:  
- The price of Liberian goods abroad will fall, helping to boost exports / The price of importing goods from the USA will rise, which will reduce the value of imports $(1)$.  
- As imports fall and exports rise, the net effect is an improving of the net trade $(1)$. | (4) |
<table>
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<th>Mark</th>
</tr>
</thead>
</table>
| 12 (a)   | **Knowledge 2**  
- 1 mark for reference to the cost of borrowing.  
- 1 mark for stating that it is set by a central bank. | (2) |
| 12 (b)   | **Knowledge 2, Application 2**  
**QS9**: Interpret, apply and analyse information in written, graphical and tabular forms.  
**Knowledge**  
Up to 2 marks for offering a definition of disinflation:  
- Disinflation is where prices are rising (1) but at a slower rate (1).  
- Disinflation is where the rate of inflation (1) is falling (1).  
**Application**  
Up to 2 marks for reference to Figure 2:  
- In 2010, inflation was 12% and approximately 9% in 2011 (1).  
- In 2013, inflation was approximately 11% and in 2014 it was just above 6% (1).  
- Between 2014 and 2015, inflation fell from just above 6% to just below 6% (1),  
- In 2013, average prices rose 11% but by 2015 they rose by just below 6% (1), showing that prices rose in each year but that the rate of growth in average prices fell (1), | (4) |
<table>
<thead>
<tr>
<th>Question</th>
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<th>Mark</th>
</tr>
</thead>
</table>
| 12 (c)   | Knowledge 2, Application 2, Analysis 2  
QS9: Interpret, apply and analyse information in written, graphical and tabular forms.  
Knowledge  
Up to 2 marks for a definition of economic growth:  
- Increase (1) in real GDP (1).  
- Increase in capacity within the economy (1).  
Application  
1 mark for reference to the growth rate in Figure 1.  
PLUS 1 mark for reference to Extract A:  
- Public sector workers earning more (1).  
- Rising exports (1).  
- Higher investment (1).  
Analysis  
Up to 2 marks for explaining how the causes affect economic growth, e.g.:  
- Public sector workers earning more – will lead to higher levels of consumption (1), leading to an increase in AD and a rise in real output (1).  
- Rising exports will inject money (1) into the Indian economy, leading to an increase in AD and a rise in real output / reference to multiplier effects (1).  
- Higher investment will boost both aggregate demand and LRAS (1) and boost real output / reference to multiplier effects (1). | (6) |
### Question 12(d)

#### Indicative content guidance

Answers must be credited by using the level descriptors (below) in line with the general marking guidance.

The indicative content below exemplifies some of the points that candidates may make but this does not imply that any of these must be included. Other relevant points must also be credited.

#### Knowledge, Application and Analysis (8 marks) – indicative content

- **Defining rapid economic growth** – fast increase in real GDP.

**Positive impacts include:**
- Continued improvements in the standard of living, helping to improve people’s quality of life as they can afford better education and health care, and to buy more resources.
- Rural areas are benefiting from the agricultural sector performing well, showing that rapid growth is helping workers on farms to benefit from better standards of living.
- Urban areas are benefiting from growth in the manufacturing and services sectors, which helps boost incomes and standards of living.
- The GDP growth is helping both the poor and rich, which means the poor and rich will have a better quality of life as they earn more.
- There may be reduced poverty, as people are able to meet their basic needs.
- If both rich and poor benefit there may well be less income inequality.
- The budget deficit fell from 5.8% to 3.9% of GDP as tax revenues improved in 2015, helping the government to work towards a balanced budget.

**Negative impacts include:**
- Some Indian cities are struggling with pollution – these external costs have a negative impact on Indian citizens’ health and quality of life.
- Delhi experienced severe air pollution, which closed schools for three days and banned cars in the city. With cars banned, this could affect productivity of business if workers struggle to get to work. Closed schools could impact on the standards of education if they persist.
- Imports grew by 8.1% in October 2016, contributing to the balance of trade deficit rising by 4.8%. This is a net withdrawal from the economy and may lower AD.
- Demand-pull inflation might emerge as AD rises.

Students may offer positive or negative impacts as knowledge, application or analysis. They may then offer the other argument as evaluation points.

<table>
<thead>
<tr>
<th>Level</th>
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<tbody>
<tr>
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<td>0</td>
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<tr>
<td><strong>Level 1</strong></td>
<td>1–3</td>
<td>Displays isolated, superficial or imprecise knowledge and understanding of economic terms, principles, concepts, theories and models. Use of generic material or irrelevant information or inappropriate examples. Descriptive approach which has no chains of reasoning.</td>
</tr>
<tr>
<td><strong>Level 2</strong></td>
<td>4–6</td>
<td>Displays elements of knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to apply knowledge and understanding to some elements of the question. Some evidence and contextual references are evident in the answer. Chains of reasoning in terms of cause and/or consequence are evident but they may not be developed fully or some stages are omitted.</td>
</tr>
<tr>
<td>Level</td>
<td>Mark</td>
<td>Descriptor</td>
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<tr>
<td>Level 3</td>
<td>7–8</td>
<td>Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to link knowledge and understanding in context using relevant examples which are fully integrated to address the broad elements of the question. Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence.</td>
</tr>
</tbody>
</table>

**Evaluation (6 marks) – indicative content**
- Inflation has in fact fallen from approx. 11% to 6% while economic growth rose.
- Rising imports are less of a problem if acquiring capital goods that will further boost growth.
- Pollution may be concentrated in few areas so not impacting a significant proportion of population.
- As the economy becomes richer, the economy will be able to afford clean up/new technology to reduce pollution.
- There is still a budget deficit, so economic growth may not help boost tax revenues to cover the government spending.
- The rate of economic growth is high – the magnitude is significant.
- The long-run impact may become more significant, e.g. impact on budget, inflation and pollution.

<table>
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</thead>
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<tr>
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<td>5–6</td>
<td>Evaluation recognises different viewpoints and/or is critical of the evidence. Appropriate reference to evidence/context. Evaluation is supported by a logical chain of reasoning.</td>
</tr>
<tr>
<td>Level 2</td>
<td>3–4</td>
<td>Evidence of evaluation of alternative approaches. Some supporting evidence/reference to context. Evaluation is supported by a partially-developed chain of reasoning.</td>
</tr>
<tr>
<td>Level 1</td>
<td>1–2</td>
<td>Identification of generic evaluative comments. No supporting evidence/reference to context. No evidence of a logical chain of reasoning.</td>
</tr>
<tr>
<td>Question</td>
<td>Indicative content</td>
<td>Mark</td>
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<tr>
<td>12(e)</td>
<td><strong>Knowledge 2, Application 2, Analysis 2, Evaluation 2</strong></td>
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<tr>
<td></td>
<td><strong>Knowledge</strong></td>
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<tr>
<td></td>
<td>Up to 2 marks for knowledge of interest rates, e.g.:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Definition of base interest rates, with reference to the cost of borrowing (1).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Changes in base interest rate is part of monetary policy (1).</td>
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<tr>
<td></td>
<td>• Monetary policy is a part of demand-side policy (1).</td>
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<td></td>
<td><strong>Analysis</strong></td>
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<td></td>
<td>Up to 2 marks for linked explanations showing the impact on the Indian economy, e.g.:</td>
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<tr>
<td></td>
<td>• A fall in the interest rate will boost AD (1) to avoid reduction in real output (1).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Rising AD will cause prices to rise (1) which is demand-pull inflation (1).</td>
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<tr>
<td></td>
<td>• It may encourage investment (1) this capital expenditure may boost productive potential shifting LRAS rightwards (1).</td>
<td></td>
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<tr>
<td></td>
<td>• It may cause depreciation of currency (1) as India will be less attractive to invest in (1).</td>
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<tr>
<td></td>
<td><strong>Application</strong></td>
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<td></td>
<td>Up to 2 marks for reference to the given sources, e.g.:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The base interest rate fell from 6.5% to 6.25% (1).</td>
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<tr>
<td></td>
<td>• This rate cut lessens the risk of Brexit (1).</td>
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<tr>
<td></td>
<td>• The rate cut avoids problems that may arise due to banking-sector problems in Europe (1).</td>
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<tr>
<td></td>
<td>• The rate cut avoids problems that come from the economic slowdown in China (1).</td>
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<tr>
<td></td>
<td>• Global growth has been slowing (1).</td>
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<td></td>
<td>Each of the above may be linked to how AD is likely to fall as demand for exports fall (1).</td>
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<tr>
<td></td>
<td><strong>Evaluation</strong></td>
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<tr>
<td></td>
<td>Up to 2 marks for evaluative comments, e.g.:</td>
<td></td>
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<tr>
<td></td>
<td>• Inflation is under control (1) so inflation rises may not be significant. (1).</td>
<td></td>
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<tr>
<td></td>
<td>• There is a delay before interest rates have an impact on the economy (1) so the effect may be felt only in the long term (1).</td>
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<tr>
<td></td>
<td>• Indian interest rates are still relatively high (1), e.g. there are negative rates or low rates in Japan, Eurozone and UK (1).</td>
<td></td>
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<tr>
<td></td>
<td>• There is only a small (0.25% point) change in interest rates (1) so the magnitude of interest rate change is small (1).</td>
<td>(8)</td>
</tr>
</tbody>
</table>
### Question 13

#### Indicative content guidance

Answers must be credited by using the level descriptors (below) in line with the general marking guidance.

The indicative content below exemplifies some of the points that candidates may make, but this does not imply that any of these must be included. Other relevant points must also be credited.

**Knowledge, Application and Analysis (12 marks) – indicative content**

- Supply-side policies – these aim to improve the supply side of the economy.
- Supply-side policies aim to increase productivity, competition and incentives.
- Argentina has both low growth and relatively high inflation.

**Free market measures:**

- Deregulation of labour markets – makes it easier to recruit and lay off workers as required, which may encourage more employment and production.
- Privatisation – moves ownership from a sometimes inefficient / complacent public sector to the private sector, where efficiency gains are important to achieve profitability.
- Reduction in taxation – for example, lowering income tax may give a greater incentive to work, increasing the supply of labour and the ability for firms to employ more people.
- Reduction in corporation tax – will leave more profit for the firm, enabling them to invest more and helping to achieve more growth.

**Interventionist methods:**

- Investment in education, training and skills – will improve human capital, helping to raise productivity and shift LRAS right.
- Incentives for investment.
- Infrastructure investment – such as transport links and communication links, for example broadband, will make it cheaper for businesses to do business. This will enable them to increase supply.

- How each policy improves the supply side.
- Diagram to show rightward shift of LRAS.
- Causes price level to fall – deflationary pressure.
- Causes real output to rise – economic growth

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</table>
Credit being available means banks have money to lend consumers.

Evaluation recognises different viewpoints and/or is critical of the analysis. Some evidence and contextual references are evident but they may not be developed fully or some stages are omitted.

Evaluation is supported by a logical and multi-stage chains of reasoning in terms of cause and/or consequence.

Opportunity costs – less available for health care if money is spent on education etc.

Measurement costs – what is the right amount of intervention needed?

Magnitude – much depends on the size of investment.

Time frame – it may take time for policy to impact, e.g. education takes years to have an effect.

Government failure, e.g. excessive admin costs, may result in net welfare loss.

Investment in education, training and skills – may not be targeted in the right areas.

Incentives for investment – some of the incentives may be targeted at the wrong areas.

Infrastructure investment takes time to put in place.

Privatisation – natural monopolies may exploit customers by charging a high price or require regulation.

Reduction in taxation – may worsen the budget deficit.

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<td>Level 4</td>
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<td>Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to link knowledge and understanding in context using appropriate examples which are fully integrated to address the broad elements of the question. Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence.</td>
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**Evaluation (8 marks) – indicative content**

- Opportunity costs – less available for health care if money is spent on education etc.
- Measurement costs – what is the right amount of intervention needed?
- Magnitude – much depends on the size of investment.
- Time frame – it may take time for policy to impact, e.g. education takes years to have an effect.
- Government failure, e.g. excessive admin costs, may result in net welfare loss.
- Investment in education, training and skills – may not be targeted in the right areas.
- Incentives for investment – some of the incentives may be targeted at the wrong areas.
- Infrastructure investment takes time to put in place.
- Privatisation – natural monopolies may exploit customers by charging a high price or require regulation.
- Reduction in taxation – may worsen the budget deficit.

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<td>Evaluation recognises different viewpoints and/or is critical of the evidence, leading to an informed judgement. Appropriate reference to evidence/context. Evaluation is supported by a logical chain of reasoning.</td>
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Question 14

**Indicative content guidance**

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**Knowledge, Application and Analysis (12 marks) – indicative content**

- Credit being available means banks have money to lend consumers. This means consumers can gain credit cards, loans and other borrowings. This enables consumption to take place as they can fund larger purchases.
- Disposable income may be important. As a person’s income rises they have more available to put towards consumption.
- Interest rates may be important. If interest rates are low this may encourage consumption as the cost of borrowing is now lower.
- Consumer confidence – if consumers lack confidence they may put off expenditure. This will reduce consumption.
- Level of welfare payments – if welfare payments fall, then those on benefits may earn less and have less money for consumption.
- Wealth effects – as house prices rise or share prices rise, the value of assets rises, and they feel wealthier and more confident to spend more money. This will boost consumption.

<table>
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### Evaluation (8 marks) – indicative content

- Even if interest rates are low, if banks are not willing to lend then this will not boost consumption.
- It depends on amount of consumption that is normally funded through borrowing.
- It depends on the numbers in receipt of benefits or other welfare payments.
- The availability of credit may have more impact on investment for businesses.
- Magnitude – it depends on how significant the borrowing to funding investment is.
- Time frame – over time, people may adjust and find different ways to fund consumption.

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</table>
| **Level 1** | 1–3 | Identification of generic evaluative comments.  
No supporting evidence/reference to context.  
No evidence of a logical chain of reasoning. |
| **Level 2** | 4–6 | Evidence of evaluation of alternative approaches.  
Some supporting evidence/reference to context.  
Evaluation is supported by a partially-developed chain of reasoning. |
| **Level 3** | 7–8 | Evaluation recognises different viewpoints and/or is critical of the evidence, leading to an informed judgement.  
Appropriate reference to evidence/context.  
Evaluation is supported by a logical chain of reasoning. |
Even if interest rates are low, if banks are not willing to lend this will not boost consumption.

It depends on the amount of consumption that is normally funded through borrowing.

It depends on the numbers in receipt of benefits or other welfare payments.

The availability of credit may have more impact on investment for businesses.

Magnitude – it depends on how significant the borrowing to funding investment is.

Time frame – over time, people may adjust and find different ways to fund consumption.
SECTION A

Answer ALL questions in this section.

Questions must be answered with a cross in a box ✗. If you change your mind about an answer, put a line through the box ❌ and then mark your new answer with a cross ✗.

1 In 2015, the minimum wage rate in Indonesia was increased by 14%. If the elasticity of demand for labour is -0.5, then the demand for labour will:

☐ A fall by 28%
☐ B fall by 7%
☐ C rise by 7%
☐ D rise by 14%

(Total for Question 1 = 1 mark)

2 Nissan operates a car-production plant in Mexico. Following the depreciation of the Mexican peso in 2016, Nissan faced a significant increase in the cost of imported vehicle components. What is the most likely impact on Nissan’s costs and on the prices of its cars in Mexico?

<table>
<thead>
<tr>
<th>Average cost</th>
<th>Marginal cost</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Fall</td>
<td>Fall</td>
<td>Fall</td>
</tr>
<tr>
<td>B Rise</td>
<td>Rise</td>
<td>Unchanged</td>
</tr>
<tr>
<td>C Unchanged</td>
<td>Rise</td>
<td>Unchanged</td>
</tr>
<tr>
<td>D Rise</td>
<td>Rise</td>
<td>Rise</td>
</tr>
</tbody>
</table>

(Total for Question 2 = 1 mark)

3 In 2016, 10% of senior business executives in Brazil believed that a poorly-educated workforce was the main problem for their operations and growth. This suggests that there is:

☐ A geographical immobility of labour
☐ B occupational immobility of labour
☐ C a low vacancy rate
☐ D a high rate of net migration into Brazil

(Total for Question 3 = 1 mark)
4 The diagram shows a short-run marginal cost curve for a firm.

Which one of the following must be true as output rises from point X to point Y?

- A Marginal productivity is falling
- B Average cost is rising
- C There are decreasing returns to scale
- D Total cost is falling

(Total for Question 4 = 1 mark)

5 A profit-maximising firm is operating in a monopolistically competitive market in the long run. Which one of the following is true?

- A It will operate at the productively efficient level of output.
- B It will operate at the allocatively efficient level of output.
- C It will produce at an output where normal profits are made.
- D It will produce at the output where marginal revenue is zero.

(Total for Question 5 = 1 mark)
The diagram shows the supply, average revenue and marginal revenue schedules for parking spaces in a car park.

At which price would the car park’s total revenue be maximised?

- A Zero
- B 0J
- C 0K
- D 0F

(Total for Question 6 = 1 mark)

TOTAL FOR SECTION A = 6 MARKS
SECTION B

Study Figure 1 and Extracts A and B in the Source booklet before answering Question 7. Write your answers in the space provided on the following pages.

7  (a) With reference to Figure 1, calculate the four-firm concentration ratio of the inkjet printer market. You are advised to show your working.  

(b) With reference to Figure 1 and Extract A, explain two characteristics of the oligopolistic structure of the inkjet printer market.  

(c) With reference to Extract A, analyse the cross elasticity of demand between low-price non-HP cartridges and HP cartridges, before 13 September 2016.  

(d) With reference to Extract B, examine the likely effect of a fall in demand for personal computers on HP’s profits. Illustrate your answer with an appropriate diagram.  

(e) With reference to the information provided, discuss two pricing strategies which HP could use to increase its revenue. Illustrate your answer with an appropriate diagram(s).
7 (a) With reference to Figure 1, calculate the four-firm concentration ratio of the inkjet printer market. You are advised to show your working.

(b) With reference to Figure 1 and Extract A, explain two characteristics of the oligopolistic structure of the inkjet printer market.
(c) With reference to Extract A, analyse the cross elasticity of demand between low-price non-HP cartridges and HP cartridges, before 13 September 2016.

(6)
(d) With reference to Extract B, examine the likely effect of a fall in demand for personal computers on HP’s profits. Illustrate your answer with an appropriate diagram.
(e) With reference to the information provided, discuss **two** pricing strategies which HP could use to increase its revenue. Illustrate your answer with an appropriate diagram(s).

(14)
SECTION C

Answer TWO questions from this section.

8 In October 2016, the cigarette manufacturer, British American Tobacco, offered $47 billion to take over Reynolds American, a cigarette manufacturer based in the USA.

Evaluate the likely economic effects of such a takeover. Illustrate your answer with an appropriate diagram(s).

(Total for Question 8 = 20 marks)

9 Between 2009 and 2014, the number of immigrants to South Korea increased by an average annual rate of 9.3%.

Evaluate the likely effects of a significant increase in immigration on a country’s economy. Illustrate your answer with an appropriate diagram(s).

(Total for Question 9 = 20 marks)

10 ‘Amtrak is a natural monopoly for rail travel between cities in the USA.’

To what extent are natural monopolies efficient? Illustrate your answer with an appropriate diagram(s).

(Total for Question 10 = 20 marks)
To what extent are natural monopolies efficient? Illustrate your answer with an appropriate diagram(s).

Amtrak is a natural monopoly for rail travel between cities in the USA.

Evaluate the likely economic effects of such a takeover. Illustrate your answer with an appropriate diagram(s).

In October 2016, the cigarette manufacturer, British American Tobacco, offered...
Write the answer to your SECOND chosen question here

Indicate which question you are answering by marking a cross in the box ☑️. If you change your mind, put a line through the box ✗ and then indicate your new question with a cross ☑️.

Chosen question number:  Question 8 ☐  Question 9 ☐  Question 10 ☐
Do not return this Source booklet with the question paper.
Sources for use with Section B.

The inkjet printer market

Figure 1 - Global market share of inkjet printer manufacturers, 2015

Extract A - Printer ink cartridges stop working

Hewlett Packard (HP) is a transnational company that sells a wide range of products, including printers, printer inkjet cartridges, personal computers and cameras. It spends over $400 million in advertising in the USA alone.

Printer ink cartridges are very expensive. However, until 13 September 2016, most HP printers accepted refills made by other businesses. These are sold at significantly lower prices than HP refill cartridges. Consequently, many consumers buy the cheaper non-HP cartridges. Often, there is no difference in quality between the HP cartridges and those made by other businesses. Naturally, HP dislikes this practice.

On 13 September 2016, large numbers of HP inkjet printers stopped working with the lower-price non-HP cartridges. The printer information displays warned about a ‘cartridge problem’ or claimed cartridges were missing. One Dutch ink cartridge seller said it received over 1 000 complaints in a single day. HP appears to have coded the printer software, setting 13 September 2016 as the date that non-HP cartridges would stop the printers working.

An HP spokesman stated that the software update was intended to ‘protect HP’s innovations and intellectual property’.

The company has not helped customers, many of whom have now been left with unusable equipment that they need to run their homes and businesses. Questions are currently being asked about whether HP’s actions are legal.
Extract B - HP’s attempt to diversify

Consumers are buying more smartphones and tablets, which has reduced demand for personal computers (PCs) substantially. Experts predict that PC sales will drop by around 6% in 2015. This is the fourth consecutive year that demand for PCs has fallen. Lower PC sales have resulted in falling revenues for HP since 2011. The company had revenue of $127 billion in 2011. Revenue fell to $111 billion in 2014, a drop of 12.6% for that period.

HP had tried to expand beyond the PC business and entered the mobile computing sector, acquiring Palm in 2010 for $1.2 billion. The objective of this acquisition was to produce software and hardware products, including tablets and netbooks. However, only a year later, HP announced that it would be stopping the manufacture of all smartphones and tablets. Apple had a significant advantage in the smartphone and tablet market, which made it difficult for HP to compete.

Acknowledgements

<table>
<thead>
<tr>
<th>Question</th>
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<tr>
<td>QS8: Make and interpret calculations of elasticity</td>
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</tr>
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<tr>
<td>QS9: Interpret, apply and analyse information in written, graphical and tabular forms</td>
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<td>6</td>
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</table>

**Application 2**

**Quantitative skills assessed:**
- QS2: Calculate, use and understand percentages, percentage changes and percentage point changes.

Up to 2 marks for calculation:
- 4 firm concentration ratio: 
  \[ 40\% + 21\% + 13\% + 7\% = 81\% \]

**Knowledge 2**

Up to 2 marks for knowledge of characteristics of oligopoly, e.g.:
- Non-price competition
- Diversification into other markets
- Firms may compete by using branding/advertising
- High concentration ratio/intersdependence/collusion

Application
Up to 2 marks for applying the characteristics to the inkjet printer market, e.g.:
- For non-price competition, e.g. measures to prevent low-price non-HP cartridges being used in HP's printers.
- For diversification into other markets, e.g. HP attempt to enter market for smartphones.
- For branding/advertising, e.g. HP spends over $400 million on advertising in the USA.

**Figure 1** indicates an oligopolistic market (high concentration ratio) so there will be interdependence/collusion, e.g. they all sell printers at a low price.
Unit 3 – Mark scheme

<table>
<thead>
<tr>
<th>Question</th>
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<tbody>
<tr>
<td>1</td>
<td>QS8: Make and interpret calculations of elasticity.</td>
<td>B</td>
<td>(1)</td>
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<td>2</td>
<td>QS9: Interpret, apply and analyse information in written, graphical and tabular forms.</td>
<td>D</td>
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<tr>
<td>3</td>
<td>–</td>
<td>B</td>
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<tr>
<td>4</td>
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<td>A</td>
<td>(1)</td>
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<tr>
<td>5</td>
<td>QS9: Interpret, apply and analyse information in written, graphical and tabular forms.</td>
<td>C</td>
<td>(1)</td>
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<td>6</td>
<td>QS6: Calculate cost, revenue and profit (marginal, average, totals). QS9: Interpret, apply and analyse information in written, graphical and tabular forms.</td>
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<tr>
<td>7(a)</td>
<td>Application 2</td>
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<td></td>
<td>Quantitative skills assessed: QS2: Calculate, use and understand percentages, percentage changes and percentage point changes.</td>
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<td>Up to 2 marks for calculation: 4 firm concentration ratio: 40% + 21% + 13% + 7% = 81%</td>
<td>NB Full marks for correct answer (81%), regardless of working.</td>
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<tr>
<td>7(b)</td>
<td>Knowledge 2 Application 2</td>
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<td>Knowledge Up to 2 marks for knowledge of characteristics of oligopoly, e.g.: • Non-price competition (1). • Diversification into other markets (1). • Firms may compete by using branding / advertising (1). • High concentration ratio / interdependence / collusion (1).</td>
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<td>Application Up to 2 marks for applying the characteristics to the inkjet printer market, e.g.: • For non-price competition, e.g. measures to prevent low-price non-HP cartridges being used in HP’s printers (1). • For diversification into other markets, e.g. HP attempt to enter market for smartphones (1). • For branding / advertising, e.g. HP spends over $400 million on advertising in the USA (1). • Figure 1 indicates an oligopolistic market (high concentration ratio) so there will be interdependence / collusion, e.g. they all sell printers at a low price (1).</td>
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</tbody>
</table>
| **7(c)** | **Knowledge 2 Application 2 Analysis 2**<br>Quantitative skills assessed:<br>**QS8**: Make and interpret calculations of elasticity<br>**Knowledge**<br>1 mark for either a definition or formula of cross-elasticity of demand:<br>• Definition of cross-elasticity of demand: responsiveness of quantity demanded for product X to a change in price of product Y (1).<br>• Formula of cross-elasticity of demand:<br>\[
\text{% change in quantity demanded of product X} \quad \text{% change in price of Product Y}
\]
(1)<br>PLUS<br>1 mark for definition or implied knowledge of substitutes: one product may be bought in place of another (1).<br>**Application**<br>Up to 2 marks for application to printer cartridges, e.g.:<br>• HP cartridges and low-price cartridges can be used interchangeably / are substitutes. (1)<br>• Reference to Extract 1: consumers are using low-price cartridges instead of HP cartridges (1).<br>**Analysis**<br>Up to 2 marks for linked explanation, e.g.:<br>• A rise in the price of HP cartridges would cause an increase in demand / rightward shift in demand curve for low-price cartridges. (1)<br>• Consequently, XED would be positive (1). | **(6)** |
### Question 7(d)

**Knowledge 2 Application 2 Analysis 2 Evaluation 2**

Quantitative skills assessed:
- **QS4**: Construct and interpret a range of standard graphical forms.
- **QS9**: Interpret, apply and analyse information in written, graphical and tabular forms.

#### Knowledge

Up to 2 marks for drawing a diagram that shows knowledge of:
- Original AR, MR, AC, MC and profit-maximising equilibrium (1).
- Fall in demand would cause leftward shift in AR curve and corresponding leftward shift in MR curve (1).

#### Analysis

Up to 2 marks for linked explanation of impact on HP’s profits, e.g.:
- Profit-maximising output would fall from Q to Q1 / price will fall from P to P1 (1).
- Revenue would fall from 0P x 0Q to 0P1 x 0Q1. (1)
- Final profit-maximising equilibrium showing lower price, output (1) and supernormal profit (1).

#### Application

Up to 2 marks for application to context of PC market, e.g.:
- Demand for PCs has dropped because of increased use of smartphones and tablets to access the internet (1).
- PCs are not portable so are a poor substitute for mobile devices (1).
- Diagram related to context (1).
<table>
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<tr>
<th>Question</th>
<th>Answer</th>
<th>Mark</th>
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</thead>
</table>
| **7(d) Cont.** | Evaluation  
Up to 2 marks for evaluative comments, e.g.:  
- Magnitude: depends on size of the fall in demand (6% fall in PC sales in 2015) (1), a small change will have little impact because it will result in only a small shift in AR and MR curves (1).  
- Fall in profits on PCs may be offset by higher profits on HP’s other products, e.g. ink cartridges (1) because there is less competition from low-price cartridges (1).  
- Fall in profits may be offset by cost reductions / increases in productivity (1), which would cause a downward shift in AC and MC curves (1). | (8) |
### Question 7(e)  
**Indicative content guidance**

Answers must be credited by using the level descriptors (below) in line with the general marking guidance. The indicative content below exemplifies some of the points that candidates may make but this does not imply that any of these must be included. Other relevant points must also be credited.

**Quantitative skills assessed**
- **QS4**: Construct and interpret a range of standard graphical forms.
- **QS9**: Interpret, apply and analyse information in written, graphical and tabular forms.

**Knowledge, Application, Analysis (8 marks) – indicative content**
- Change from profit-maximising output \((MC = MR)\) to revenue maximising output \((MR = 0)\). May be illustrated diagrammatically.
- Change from profit-maximising output \((MC = MR)\) to sales maximising output \((AC = AR)\). May be illustrated diagrammatically.
- Predatory pricing: selling its products at below average cost with aim of driving out competitors, increasing market share and so increasing revenue in the long-run. May be illustrated diagrammatically.
- Limit pricing: setting price at a level which will deter potential new entrants so enabling the firm to increase total revenue in the long-run. May be illustrated diagrammatically.
- Collusive price-fixing agreements with other manufacturers so that HP can behave like a monopolist. May be illustrated with game theory analysis.
- Price discrimination, e.g. for cartridges if HP is successful in maintaining its monopoly.

**Restrict to a maximum of 6 marks for Knowledge, Application and Analysis if no diagram provided.**

<table>
<thead>
<tr>
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<td></td>
<td>No rewardable material.</td>
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<tr>
<td><strong>Level 1</strong></td>
<td>1–3</td>
<td>Displays isolated, superficial or imprecise knowledge and understanding of economic terms, principles, concepts, theories and models. Use of generic material or irrelevant information or inappropriate examples. Descriptive approach which has no chains of reasoning.</td>
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<tr>
<td><strong>Level 2</strong></td>
<td>4–6</td>
<td>Displays elements of knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to apply knowledge and understanding to some elements of the question. Some evidence and contextual references are evident in the answer. Chains of reasoning in terms of cause and/or consequence are evident but they may not be developed fully or some stages are omitted.</td>
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<tr>
<td><strong>Level 3</strong></td>
<td>7–8</td>
<td>Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to link knowledge and understanding in context using relevant examples which are fully integrated to address the broad elements of the question. Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence.</td>
</tr>
</tbody>
</table>
Evaluation (6 marks) – indicative content

- In the short-run, revenues may fall, e.g. in the case of sales maximisation, predatory pricing and limit pricing.
- Decision on pricing strategy may be influenced by the type of product, e.g. much higher competition in the PC market than in the printer cartridge market (after 13 September 2016).
- Non-price factors may be more significant in determining sales, so pricing strategies may not result in an increase in revenue.
- Overall impact depends on how other firms react.
- Price fixing agreements are illegal in most countries; firms involved could be fined and directors imprisoned.

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<td>1–2</td>
<td>Identification of generic evaluative comments. No supporting evidence/reference to context. No evidence of a logical chain of reasoning.</td>
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<td>3–4</td>
<td>Evidence of evaluation of alternative approaches Some supporting evidence/reference to context. Evaluation is supported by a partially-developed chain of reasoning.</td>
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<td>5–6</td>
<td>Evaluation recognises different viewpoints and/or is critical of the evidence. Appropriate reference to evidence/context. Evaluation is supported by a logical chain of reasoning.</td>
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Evaluation (6 marks) – indicative content

- In the short run, revenues may fall, e.g. in the case of sales maximisation, predatory pricing and limit pricing.
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| 8        | **Indicative content guidance**
          | Answers must be credited by using the level descriptors (below) in line with the general marking guidance. The indicative content below exemplifies some of the points that candidates may make, but this does not imply that any of these must be included. Other relevant points must also be credited. |
|          | **Quantitative skills assessed**
          | QS4: Construct and interpret a range of standard graphical forms. |
|          | **Knowledge, Application, Analysis (12 marks) – indicative content**
          | - Recognition of horizontal integration. |
|          | - Economies of scale: falling long-run average costs as output increases. Examples include:
          |   o technical – increased use of machinery
          |   o managerial – employment of specialist managers
          |   o marketing – cost savings in terms of advertising
          |   o financial – ability to borrow money at lower rates of interest
          |   o risk-bearing – spread of risks, e.g. increase in sales in different countries.
          | All of the above would cause a fall in costs and an increase in profits. |
|          | - Increase in market share: possibility of higher revenues and profits |
|          | - Impact on shareholders:
          |   o those holding Reynolds American shares will benefit from being offered a price above current market price
          |   o BAT shareholders may benefit from higher share price if takeover happens. |
|          | - Impact on workforce:
          |   o mergers usually result in rationalisation and some job losses / unemployment. |
|          | - Impact on customers:
          |   o lower costs could result in lower prices and increased consumer surplus. |
|          | **Restrict to a maximum of 9 marks for Knowledge, Application and Analysis if no diagram provided.** |

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<td>Displays elements of knowledge and understanding of economic terms, principles, concepts, theories and models. Limited application of knowledge and understanding to economic problems in context. A narrow response or superficial, only two-stage chains of reasoning in terms of cause and/or consequence.</td>
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Increase in supply of labour
Impact on particular markets
Impact on public
Externalities resulting from immigration
Rightward shift in supply

**Level 3**

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<td>7–9</td>
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**Level 4**

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<tr>
<td>10–12</td>
<td>Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to link knowledge and understanding in context using appropriate examples which are fully integrated to address the broad elements of the question. Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence.</td>
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**Evaluation (8 marks) – indicative content**

- Diseconomies of scale: danger that the new larger company could result in an increase in long-run average costs as a result of, for example, increased costs of administration and co-ordination.
- The size of the takeover ($47 billion) is large and would be likely to have a significant impact on market share.
- Demand for cigarettes is price inelastic so would increase market power of BAT considerably.
- Although market share might increase, the overall market for cigarettes may be declining, especially in developed countries. Also, the development of substitutes, for example e-cigarettes, might reduce demand for cigarettes.
- BAT may have increased debt so BAT shareholders might not benefit in the long run.
- Governments might continue to increase the tax on cigarettes so consumers might not benefit from lower prices.
- Also, BAT might have gained a significant degree of monopoly power so could increase its prices.

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## Question 9

### Indicative content guidance

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### Quantitative skills assessed:

**QS4**: Construct and interpret a range of standard graphical forms.

### Knowledge, Application, Analysis (12 marks) – indicative content

- Increase in supply of labour, leading to rightward shift in supply curve, leading to fall in wage rate in specific industries. May be illustrated by supply and demand diagram.
- Firms have greater choice of workers.
- Increase in skills of workforce, leading to higher productivity, leading to lower average costs of production and to higher profits.
- Rightward shift in productive possibility frontier / increase in productive capacity. May be illustrated by a PPF diagram.
- Impact on particular markets, e.g. increase in demand for houses, education services and health care.
- Externalities resulting from immigration, e.g. external benefits to firms from higher demand for their goods and services; external costs from the need to build more houses on farmland.
- Could lead to increase in real output and fall in price level. May be illustrated by an AD / AS diagram.
- Impact on public finances: if most immigrants secure jobs then tax revenues will increase.

**Restrict to a maximum of 9 marks for Knowledge, Application and Analysis if no diagram provided.**

### Level | Mark | Descriptor
--- | --- | ---
Level 1 | 0 | No rewardable material.
| 1–3 | Displays isolated, superficial or imprecise knowledge and understanding of economic terms, principles, concepts, theories and models. Use of generic material or irrelevant information or inappropriate examples. Descriptive approach which has no chains of reasoning.
Level 2 | 4–6 | Displays elements of knowledge and understanding of economic terms, principles, concepts, theories and models. Limited application of knowledge and understanding to economic problems in context. A narrow response or superficial, only two-stage chains of reasoning in terms of cause and/or consequence.
Level 3 | 7–9 | Demonstrates accurate knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to apply knowledge and understanding to some elements of the question. Some evidence and contextual references are evident in the answer. Analysis is clear and coherent. Chains of reasoning in terms of cause and/or consequence are evident but they may not be developed fully or some stages are omitted.
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<td>Evaluation (8 marks) – indicative content</td>
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</table>
| | | • Impact depends on education, skills and experience of immigrant workers. 
| | | • Impact depends on level of unemployment. 
| | | • Impact depends on net migration. 
| | | • Not all immigrants may be able and willing to work. 
| | | • Impact on wage rates in particular industries might not fall if demand for the product is rising or if there is a skills shortage. 
| | | • Impact depends on elasticity of demand for labour. 
<p>| | | • Impact on public finances depends on ratio of immigrants who are working to dependents; and number working in the informal economy. |</p>
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| 10       | **Indicative content guidance**  
Answers must be credited by using the level descriptors (below) in line with the general marking guidance. The indicative content below exemplifies some of the points that candidates may make, but this does not imply that any of these must be included. Other relevant points must also be credited.  
**Quantitative skills assessed:**  
QS4: Construct and interpret a range of standard graphical forms.  

**Knowledge, Application, Analysis (12 marks) – indicative content**  
- Understanding of natural monopoly – there are falling long-run average costs, so it is inefficient if more than one firm in the market. May include falling LRAC diagram / natural monopoly diagram. Natural monopoly and productive efficiency – production will be at lower point on LRAC curve than if there were more firms in the market:  
  - this could lead to a reduction in prices for consumers and higher consumers’ surplus.  
- Natural monopoly and allocative efficiency: natural monopolies could result in price more closely reflecting marginal cost and ensure that the goods produced reflect consumer demand. Amtrak could offer new services with the knowledge that it will have no competition.  
- Natural monopoly and dynamic efficiency: Amtrak might use super-normal profits for investment in new technology, helping to reduce LRAC over time.  

**Restrict to a maximum of 9 marks for Knowledge, Application and Analysis if no diagram provided.**  

<table>
<thead>
<tr>
<th>Level</th>
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|          | 1–3  | Displays isolated, superficial or imprecise knowledge and understanding of economic terms, principles, concepts, theories and models.  
Use of generic material or irrelevant information or inappropriate examples.  
Descriptive approach which has no chains of reasoning. |
| Level 2  | 4–6  | Displays elements of knowledge and understanding of economic terms, principles, concepts, theories and models.  
Limited application of knowledge and understanding to economic problems in context.  
A narrow response or superficial, only two-stage chains of reasoning in terms of cause and/or consequence. |
| Level 3  | 7–9  | Demonstrates accurate knowledge and understanding of economic terms, principles, concepts, theories and models.  
Ability to apply knowledge and understanding to some elements of the question. Some evidence and contextual references are evident in the answer.  
Analysis is clear and coherent. Chains of reasoning in terms of cause and/or consequence are evident but they may not be developed fully or some stages are omitted. |
| Level 4  | 10–12| Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models.  
Ability to link knowledge and understanding in context using appropriate examples which are fully integrated to address the broad elements of the question.  
Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence. |
Evaluation (8 marks) – indicative content

- Consumers might suffer from less choice and higher prices, so moving away from the allocatively-efficient level of output.
- With falling long-run average costs, allocative efficient pricing (P=MC) would result in a loss so is unlikely to be adopted by Amtrak.
- A natural monopoly might result in X-inefficiency, resulting in higher costs and higher prices.
- Workers could suffer if the firm decides to reduce employment as a means of cutting costs.
- Profits may be used for dividends rather than for investment and innovation in the products or services of the business.

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Workers could suffer if the firm decides to reduce employment as a means of cutting costs.

Profits may be used for dividends rather than for investment and innovation in the products or services of the business.
SECTION A

Answer ALL questions in this section. Write your answers in the spaces provided.

Questions must be answered with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

1 The diagram illustrates the production possibility frontiers of Country A and Country B for two products: oranges and pineapples. Given these frontiers, which one of the following statements is true?

☐ A Country A will export oranges to Country B.

☐ B Country B will not trade oranges and pineapples with Country A.

☐ C Country B has a comparative advantage in the production of oranges.

☐ D Country A has an absolute advantage in the production of pineapples.

(Total for Question 1 = 1 mark)
2 Share of net wealth held by each income quintile in Canada, 1999 and 2012.

Which one of the following can be deduced from this chart?

- A Wealth was more evenly distributed in 2012 than in 1999.
- B Income was less evenly distributed in 2012 than in 1999.
- C The value of assets held by Canadians increased between 1999 and 2012.
- D Wealth was less evenly distributed in 2012 than in 1999.

(Total for Question 2 = 1 mark)
3 Tanzania’s export price index increased from 100 in 2013 to 128.9 in the second quarter of 2016. Over the same period, the country’s import price index rose from 100 to 117.1.

What was Tanzania's terms of trade index in the second quarter of 2016?

☐ A 11.8
☐ B 90.8
☐ C 110.1
☐ D 111.8

(Total for Question 3 = 1 mark)

4 In 2016-17, Australia had a progressive income tax structure with four marginal tax rates: 19%, 32.5%, 37% and 45%. Assuming pre-tax incomes increase significantly during this financial year, after-tax incomes will:

☐ A increase proportionately less than pre-tax incomes
☐ B increase proportionately more than pre-tax incomes
☐ C increase by the same proportion as pre-tax incomes
☐ D decrease proportionately less than pre-tax incomes

(Total for Question 4 = 1 mark)

5 The European Central Bank (ECB) requires commercial banks to hold reserve asset deposits with their national central bank.

If the ECB requires commercial banks to increase these deposits, then which one of the following is likely to occur?

☐ A Bank lending to businesses and consumers will rise.
☐ B Bank profits will increase.
☐ C Bank lending to businesses and consumers will fall.
☐ D Banks will have to borrow more from central banks.

(Total for Question 5 = 1 mark)
The graph shows the demand and supply conditions for soya beans in India in 2015 and 2016. The Government guarantees a minimum support price of $P_1$ and operates a buffer stock scheme.

When output rose to $S(2016)$ then government expenditure on surplus production was:

- A LUVM
- B $P_2P_1VW$
- C XUVW
- D UVW

(Total for Question 6 = 1 mark)
SECTION B

Study Figures 1 and 2 and Extracts A and B in the Source booklet before answering Question 7. Write your answers in the space provided on the following pages.

7 (a) With reference to Figure 2 and Extract A, calculate the change in real earnings in 2015. You are advised to show your working.

(b) Explain what is meant by the phrase ‘worsening terms of trade’ (Extract A, line 15).

(c) With reference to the information provided, examine the likely impact of a fall in foreign direct investment on Russia’s balance of payments accounts.

(d) With reference to Extract A, analyse the likely effect of the recession on income inequality in Russia. Illustrate your answer with a Lorenz curve diagram.

(e) With reference to the information provided, discuss the problems of the dependence on oil and natural gas for the Russian economy.
7 (a) With reference to Figure 2 and Extract A, calculate the change in real earnings in 2015. You are advised to show your working.

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(c) With reference to the information provided, examine the likely impact of a fall in foreign direct investment on Russia's balance of payments accounts.
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(e) With reference to the information provided, discuss the problems of the dependence on oil and natural gas for the Russian economy.

(14)
With reference to the information provided, discuss the problems of the

Sample Assessment Materials – Issue 2 – June 2018 © Pearson Education Limited 2018
Central banks in the eurozone, Japan, Switzerland and Sweden set negative base rates in the three months after the UK's vote to leave the European Union in June 2016, influencing its international competitiveness.

Evaluate factors that might have caused this slow growth in world trade.

(Total for Question 7 = 34 marks)

TOTAL FOR SECTION B = 34 MARKS
SECTION C

Answer TWO questions from this section.

8 In 2016, the volume of world trade grew more slowly than world real GDP for the first time in 15 years.

Evaluate factors that might have caused this slow growth in world trade.

(Total for Question 8 = 20 marks)

9 In the three months after the UK’s vote to leave the European Union in June 2016, the value of the pound sterling depreciated by over 15% against the US dollar and the euro.

To what extent is the exchange rate of a country’s currency the most important factor influencing its international competitiveness?

(Total for Question 9 = 20 marks)

10 Central banks in the eurozone, Japan, Switzerland and Sweden set negative base interest rates in 2016.

Evaluate the use of monetary policy to stimulate an economy in a period of weak global economic growth.

(Total for Question 10 = 20 marks)
Write the answer to your FIRST chosen question here

Indicate which question you are answering by marking a cross in the box ☑. If you change your mind, put a line through the box ☒ and then indicate your new question with a cross ☑.

Chosen question number:  Question 8 ☐  Question 9 ☐  Question 10 ☐
Write the answer to your SECOND chosen question here

Indicate which question you are answering by marking a cross in the box ✗. If you change your mind, put a line through the box ✗ and then indicate your new question with a cross ✗.

Chosen question number:  Question 8  ❌  Question 9  ❌  Question 10  ❌
Write the answer to your SECOND chosen question here.
Economics
International Advanced Level
Unit 4: Developments in the global economy

Sample assessment material for first teaching
September 2018
Source booklet

Do not return this Source booklet with the question paper.
The Russian economy

Figure 1 – Real GDP growth rate, 2006–2016

Figure 2 – Annual inflation rate as measured by the Consumer Price Index, 2007–2016

Extract A – Recession and depreciation of the rouble
In 2015 and the first half of 2016, the Russian economy has been in a deep and painful recession although the pace of economic decline is slowing. Real GDP fell by 1.2% in the first quarter of 2016, following a 3.7% fall in 2015. Russia has suffered from a combination of low oil prices and economic sanctions. The low oil prices have resulted in reduced export earnings. Further, the sanctions imposed on Russia over its role in the crisis in Ukraine have severely reduced foreign direct investment (FDI) into the country. Sanctions have also made it harder for Russian firms to obtain finance from Europe and America. The Russian currency, the rouble, depreciated sharply against the dollar in 2015 and by a further 5.8% in the first eight months of 2016. This caused an increase in the rate of inflation in 2015, while nominal earnings only rose by 6.8%. A Russian ban on most food imports from Europe and America pushed prices even higher. As a result of this, millions of Russians have fallen into poverty since 2014.

The rouble depreciation benefited the tradable sectors of the economy, such as agriculture, chemicals, leather, and rubber production. Worsening terms of trade in the first half of 2016 resulted in a reduction in the current account surplus to 3.0% of GDP (from 7.1% of GDP in the same period in 2015).

Extract B – Dependence on oil and natural gas
Russia is the world's largest producer of crude oil and the second-largest producer of natural gas. They contribute more than 40% of Russia's tax revenues. Russia's economic growth is very dependent on energy exports, making up 70% of its export earnings. Russia and Europe are interdependent in terms of energy. The European Union obtains around 30% of its oil and gas from Russia. Russia is dependent on Europe as the biggest market for its oil and natural gas.

The Russian Government offered special tax incentives to energy companies prepared to invest in regions such as the Arctic Ocean that are difficult to exploit. Despite sanctions announced in March 2014, the transnational energy company Total agreed to develop energy resources in partnership with Lukoil, Russia's largest oil company. However, Total stopped its involvement in September 2014, when additional sanctions were announced. Indeed, virtually all involvement in Russian energy projects by European and American companies has ceased following the sanctions.
Extract A – Recession and depreciation of the rouble

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Acknowledgements

Figure 1 based on data taken from http://www.tradingeconomics.com/russia/gdp-growth-annual;
Figure 2 based on data taken from https://www.statbureau.org/en/russia/inflation-charts-yearly;
Extract B adapted from http://www.marcon.com/library/country_briefs/Russia/russia.pdf
Unit 4

–

Mark scheme

Question

number

Quantitative skills assessed

Answer

Mark

1

QS9: Interpret, apply and analyse information in written, graphical and tabular forms.

2

QS9: Interpret, apply and analyse information in written, graphical and tabular forms.

3

QS5: Calculate and interpret index numbers.

4

QS9: Interpret, apply and analyse information in written, graphical and tabular forms.

5

–

C

(1)

6

QS6: Calculate cost, revenue and profit (marginal, average, totals).

QS9: Interpret, apply and analyse information in written, graphical and tabular forms.

A

(1)

Question

Answer

Mark

7(a)

Application 2

Quantitative skills assessed:

QS7: Make calculations to convert money from real terms.

Up to 2 marks for calculations:

 6.8% – 15.5% = (1)

 – 8.7% (1)

Award full marks for the correct answer (minus 8.7%).

(2)
## Unit 4 – Mark scheme

<table>
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<tr>
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<th>Answer</th>
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<td>QS9: Interpret, apply and analyse information in written, graphical and tabular forms.</td>
<td>B</td>
<td>(1)</td>
</tr>
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<td>2</td>
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<td>A</td>
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### Question 7(a)

**Application 2**

Quantitative skills assessed: 

**QS7**: Make calculations to convert money from real terms.

Up to 2 marks for calculations:

- $6.8\% - 15.5\% = (1)$
- $-8.7\% = (1)$

Award full marks for the correct answer (minus 8.7%).

(2)
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<td>7(b)</td>
<td><strong>Knowledge 2, Application 2</strong>&lt;br&gt;Quantitative skills assessed:&lt;br&gt;<strong>QS9:</strong> Interpret, apply and analyse information in written, graphical and tabular forms.&lt;br&gt;&lt;br&gt;<strong>Knowledge</strong>&lt;br&gt;Up to 2 marks for identification of definition of terms of trade, e.g.:&lt;br&gt;<strong>EITHER</strong>&lt;br&gt;• The price of exports relative to the price of imports (2)&lt;br&gt;  1 mark if value is used instead of price in the above definition&lt;br&gt;<strong>OR</strong>&lt;br&gt;• Formula:&lt;br&gt;  Terms of trade = ( \frac{\text{Index of export prices}}{\text{Index of import prices}} \times 100 ) (2)&lt;br&gt;  1 mark if ((x 100)) is omitted in the above formula&lt;br&gt;&lt;br&gt;<strong>Application</strong>&lt;br&gt;Up to 2 marks for application to the Russian economy, e.g.:&lt;br&gt;• Fall in export prices (1) associated with fall in world oil prices or depreciation of the rouble (1)&lt;br&gt;• More must be exported to gain a given amount of imports (1) causing a fall in the terms of trade index (1).&lt;br&gt;• Increase in import prices (1) associated with depreciation in the value of the rouble (1)&lt;br&gt;• More must be exported to gain a given amount of imports (1) causing a fall in the terms of trade index (1).</td>
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<td>7(c)</td>
<td>Knowledge 2, Application 2, Analysis 2, Evaluation 2</td>
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**Knowledge**

Up to 2 marks for knowledge of possible effects, e.g.:
- Reduced inflows into the financial account (1).
- Fall in exports in the medium term (1).
- Fall in employment (1).

**Analysis**

Up to 2 marks for linked explanation of how two of the above points would affect Russia’s balance of payments accounts:
- Reduced inflows into the financial account may result in a foreign exchange gap (1).
- Fall in exports in the medium term may lead to a deterioration in the balance of trade and, therefore, to the current account (1).
- Fall in employment may lead to lower living standards and lower imports. Therefore, there would be an improvement in the balance of trade and, consequently, to the current account (1).

**Application**

Up to 2 marks for application to sources, e.g.:
- In first 6 months of 2015, the current account surplus fell to 3.0% of GDP from 7.1% (1).
- 70% of Russia’s export earnings are from oil and gas exports (1).

**Evaluation**

Up to 2 marks for evaluative comments:
- Future profit flows to transnational companies might fall (1) reducing the current account deficit (1).
- The decline in foreign direct investment adds to the problem for the Russian energy industry of not being able to raise funds from Europe / America (1), which will create an even larger funding gap for the industry (1).
- In the long term, less FDI will cause a leftward shift in the LRAS curve (1), reducing potential GDP (1).
<table>
<thead>
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| 7(d) | Knowledge 2, Application 2, Analysis 2  
Quantitative skills assessed:  
QS4: Construct and interpret a range of standard graphical forms  
QS9: Interpret, apply and analyse information in written, graphical and tabular forms.  

Knowledge  
Up to 2 marks for definition of recession and knowledge of Lorenz curve:  
- Understanding of recession: 2 consecutive quarters of negative economic growth (1).  
- Correctly-labelled original Lorenz curve diagram (1).  

Application  
Up to 2 marks for application to Lorenz curve:  
- Correctly drawing a new Lorenz curve moving outwards (1).  
- Recognition that an increase in inequality would lead to an increase in the Gini coefficient (1).  

Analysis  
Up to 2 marks for explanation of impact of an increase in income inequality on the Lorenz curve:  
- Recession causes an increase in unemployment and, therefore, likely to cause an increase in inequality (1).  
- Increase in income inequality reflected in increase in Gini coefficient (1) and move in Lorenz curve further away from 45° line (1).  
- The new Lorenz curve shows a smaller proportion of total income is earned by a given percentage of the population at lower income levels (1) / or a higher proportion of total income is earned by a given percentage of the population at higher income level (1). |

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**Knowledge, Application and Analysis (8 marks) – indicative content**

Possible problems include:

- Tax revenues are heavily dependent on oil and natural gas. Therefore, if the oil price falls and remains low, this would result in significant deterioration in the public finances. Oil and natural gas revenues account for more than 40% of Russia’s tax revenues.
- Export earnings are heavily dependent on oil. Therefore, if the oil price falls and remains low, this would result in significant deterioration in the current account of the balance of payments. 70% of its exports earnings come from oil and gas exports.
- The fall in oil prices would cause a fall in the rate of economic growth. Use of AD / AS analysis: fall in exports causes a fall in AD, lower real output and employment.
- Oil and natural gas are finite resources, so will eventually be depleted. Therefore, Russia needs to diversify its economy into other industries.
- Price fluctuations make it difficult for oil and gas companies to plan output and investment.
- The development of shale gas in other countries, e.g. the USA, and the move towards renewable energy may cause a long-run fall in demand for oil and natural gas.

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### Evaluation (6 marks) – indicative content

- When oil and gas prices are high, tax revenues would be high, so improving the public finances. Tax revenues may be used to improve public services.
- When oil and gas prices are high, export earnings are high so improving the balance of trade. Export earnings may be used to purchase imports of other goods and services so helping to increase living standards.
- With rapid growth in GDP before the fall in the price of oil, there was an opportunity to widen the tax base.
- Russia may have gained revenue from FDI in the oil and gas industries, especially when prices were rising.
- The oil price might increase if there is an agreement among oil producers to reduce supplies. Also, a recovery in the world economy is likely to cause an increase in oil prices.
- A fall in oil and gas prices is likely to cause a depreciation in the value of the currency which may provide an incentive to diversify into other industries / increase the competitiveness of other industries.

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### Question 8

**Indicative content guidance**

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**Knowledge, Application, Analysis (12 marks) – indicative content**

Factors include:

- Slow recovery from 2008 financial crisis: in particular, weak growth in the eurozone.
- Slowdown in China, which has reduced demand for imports (especially raw materials).
- Slow growth in developed economies has reduced demand for Chinese exports.
- Re-shoring, i.e. TNCs have brought manufacturing back to the developed economy as wages and transport costs have increased in developing economies.
- Increase in protectionism, which is partly associated with an increase in nationalism.
- Competitive depreciations, which is associated with quantitative easing, causing uncertainty and less trade between countries.

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## Evaluation (8 marks) – indicative content

- The world economy may recover – there are signs that the US economy is growing.
- The Chinese economy may improve following rebalancing towards increasing consumption.
- Further offshoring might occur in the future as poorest developing economies begin to grow.
- Future regional trade agreements, e.g. TPP, TTIP, might result in an increase in trade.
- As the world economy recovers, there may be less quantitative easing and greater currency stability.

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### Question 9

**Indicative content guidance**

Answers must be credited by using the level descriptors (below) in line with the general marking guidance. The indicative content below exemplifies some of the points that candidates may make but this does not imply that any of these must be included. Other relevant points must also be credited.

**Knowledge, Application and Analysis (12 marks) – indicative content**

- Understanding of international competitiveness: a country’s advantage or disadvantage in selling goods in international markets – this relates to both price and non-price competitiveness.

  *The significance of the exchange rate:*
  - It affects price of imports and exports (and, therefore, the terms of trade).
  - It is significant in influencing price competitiveness.

  *Other factors include:*
  - Productivity – output per hour worked. This influences average cost and, therefore, price competitiveness.
  - Relative wage costs.
  - Relative inflation rates – these affect relative price of exports.
  - Tax rates, e.g. corporation tax rate, employers’ national insurance tax rates.
  - The quality of infrastructure.
  - Regulations: environmental; health and safety, which influence the cost of doing business.
  - Non-price factors including:
    - quality
    - design
    - availability
    - reliability
    - after-sales service.

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<td>Displays elements of knowledge and understanding of economic terms, principles, concepts, theories and models. Limited application of knowledge and understanding to economic problems in context. A narrow response or superficial, only two-stage chains of reasoning in terms of cause and/or consequence.</td>
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Monetary explanation of how monetary policy might affect different economic variables.

Global economy

Negative

Negative

Quantitative easing: asset purchases by central banks to increase liquidity of the economy.

The exchange rate is particularly important for goods and services which are homogeneous and/or price elastic. The competitiveness of a country’s goods might not be the same as the competitiveness of its services. Forward contracts may limit the significance of short-term changes in the exchange rate. Productivity may not be significant if wage costs are low. High wage costs might be offset by very high productivity. A high inflation rate may be offset by exchange rate depreciation. Corporation tax may have more significant implications for foreign direct investment. Poor infrastructure may be addressed by a TNC which, for example, builds roads.

**Evaluation (8 marks) – indicative content**

- The exchange rate is particularly important for goods and services which are homogeneous and/or price elastic.
- The competitiveness of a country’s goods might not be the same as the competitiveness of its services.
- Forward contracts may limit the significance of short-term changes in the exchange rate.
- Productivity may not be significant if wage costs are low.
- High wage costs might be offset by very high productivity.
- A high inflation rate may be offset by exchange rate depreciation.
- Corporation tax may have more significant implications for foreign direct investment.
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### Question 10

**Indicative content guidance**

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**Knowledge, Application, Analysis (12 marks) – indicative content**

- Monetary policy: the use of interest rates and quantitative easing to influence the level of economic activity.
- Global economy is still recovering from the impact of the 2008 Financial Crisis, with many economies experiencing a slow rate of economic growth often caused by austerity measures, e.g. higher taxes and public expenditure cuts.
- Therefore, many countries have been using monetary policy to stimulate their economies.
- Explanation of how monetary policy might affect different economic variables, e.g. consumption, investment and the trade balance and, in turn, its impact on real output / economic growth.
- Negative interest rates means that depositors have to pay banks when placing money into a bank account.
- Negative interest rates imply that the central bank is trying to reflate the economy by adopting a very loose monetary policy. Such a policy may have been necessary because it was expansionary fiscal policy, which may have increased budget deficits further. Also, with other countries experiencing slow economic growth, it was difficult to increase exports.
- Quantitative easing: asset purchases by central banks to increase liquidity of banks so enabling them to lend more to firms and consumers.

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**Evaluation (8 marks) – indicative content**

- The use of monetary policy may be ineffective if there is a lack of business confidence, meaning that firms are unwilling to borrow to invest.
- The use of monetary policy may be ineffective if there is a lack of consumer confidence, meaning that consumers are reluctant to spend.
- Banks may be unwilling to increase lending (risk averse).
- If other countries are also adopting negative interest rates, then the impact of one country’s decision will be limited, e.g. little impact on the exchange rate.
- If there is a global recession or slow economic growth, then monetary policy may have very limited effect because, for example, confidence will be low.
- Monetary policy would be ineffective if barriers to trade are increasing.
- A central bank cannot influence changes in costs, e.g. fall in oil and commodity prices through changes in interest rates.
- In the conditions described above, governments may need to use fiscal policy to stimulate the economy – reference to Keynesian economics.
- Monetary policy may be effective only after a significant time lag.

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