Diploma Programme
Programme du diplôme
Programa del Diploma

Economics
Higher level
Paper 3

Tuesday 5 May 2015 (morning)

1 hour

Candidate session number

Instructions to candidates

- Write your session number in the boxes above.
- You are permitted access to a calculator for this paper.
- Do not open this examination paper until instructed to do so.
- Answer two questions in the boxes provided.
- Unless otherwise stated in the question, all numerical answers must be given exactly or correct to two decimal places.
- You must show all your working.
- The maximum mark for this examination paper is **[50 marks]**.

17 pages

20EP01

International Baccalaureate
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Answer **two** questions. Each question is worth **[25 marks]**. Write your answers in the boxes provided.

1. The following diagram illustrates the average cost (AC) and marginal cost (MC) curves for Firm A, which operates in a perfectly competitive market. As a price taker, Firm A charges the market price of $18 per unit.
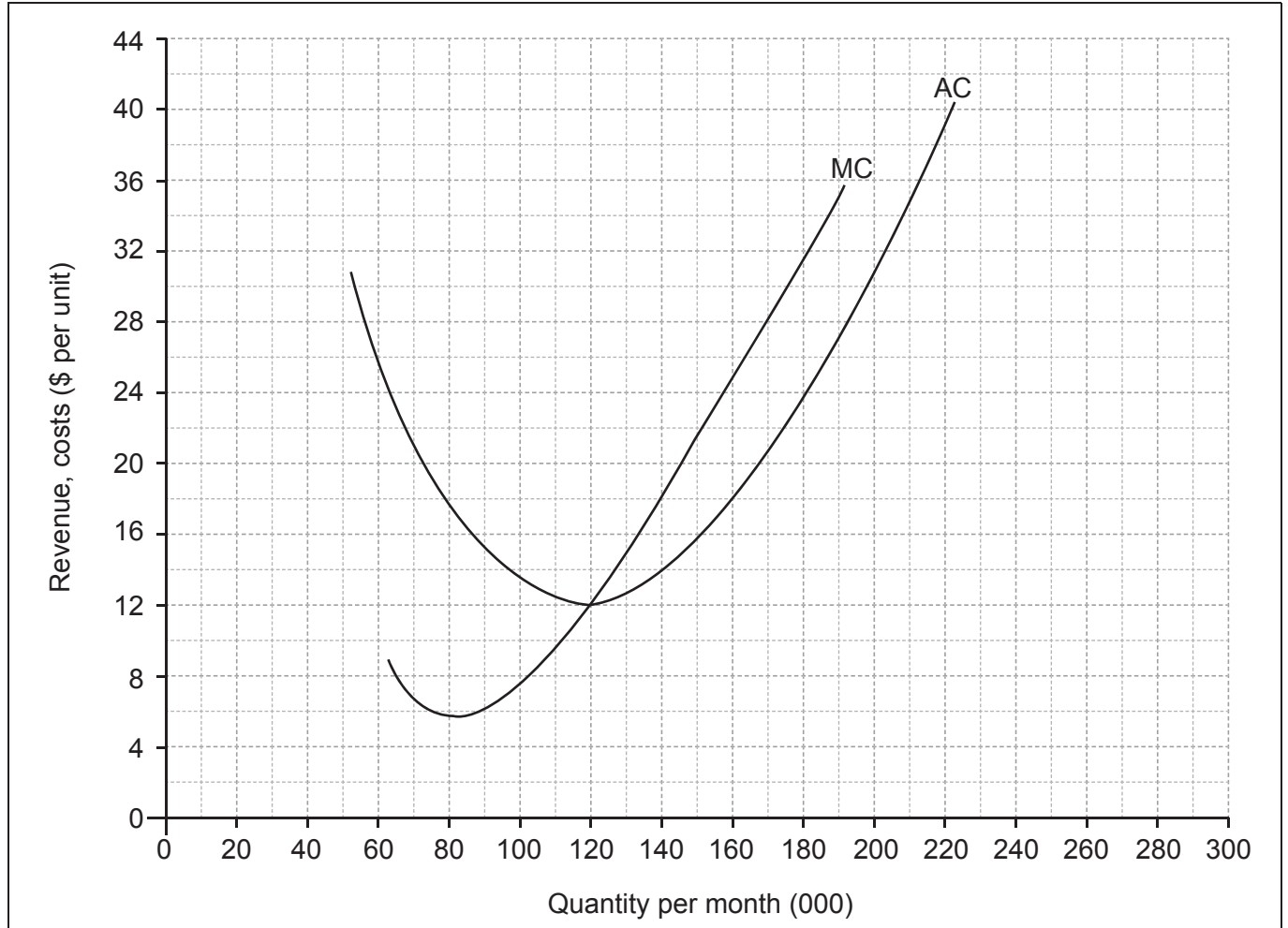
(a) (i)   On the diagram, draw and label the average revenue curve for Firm A.   [2]

     (ii) Calculate Firm A's total revenue if it produces 180 000 units per month.   [2]

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(Question 1 continued)

(iii)   Identify Firm A's short-run profit maximizing level of output.   [1]

(iv)   Calculate Firm A's short-run abnormal profit/loss at the level of output identified in part (iii).   [2]

(b)   With reference to the diagram, identify the long-run equilibrium price and level of output for Firm A.   [2]

(c)   Explain, using the diagram, how Firm A will move from short-run equilibrium to long-run equilibrium.   [4]

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(Question 1 continued)

Although the firms in this industry aim to maximize profit, it has been observed that in the real world there are some firms which engage in satisficing behaviour.

(d)   Define the term *satisficing*.   [2]

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20EP04

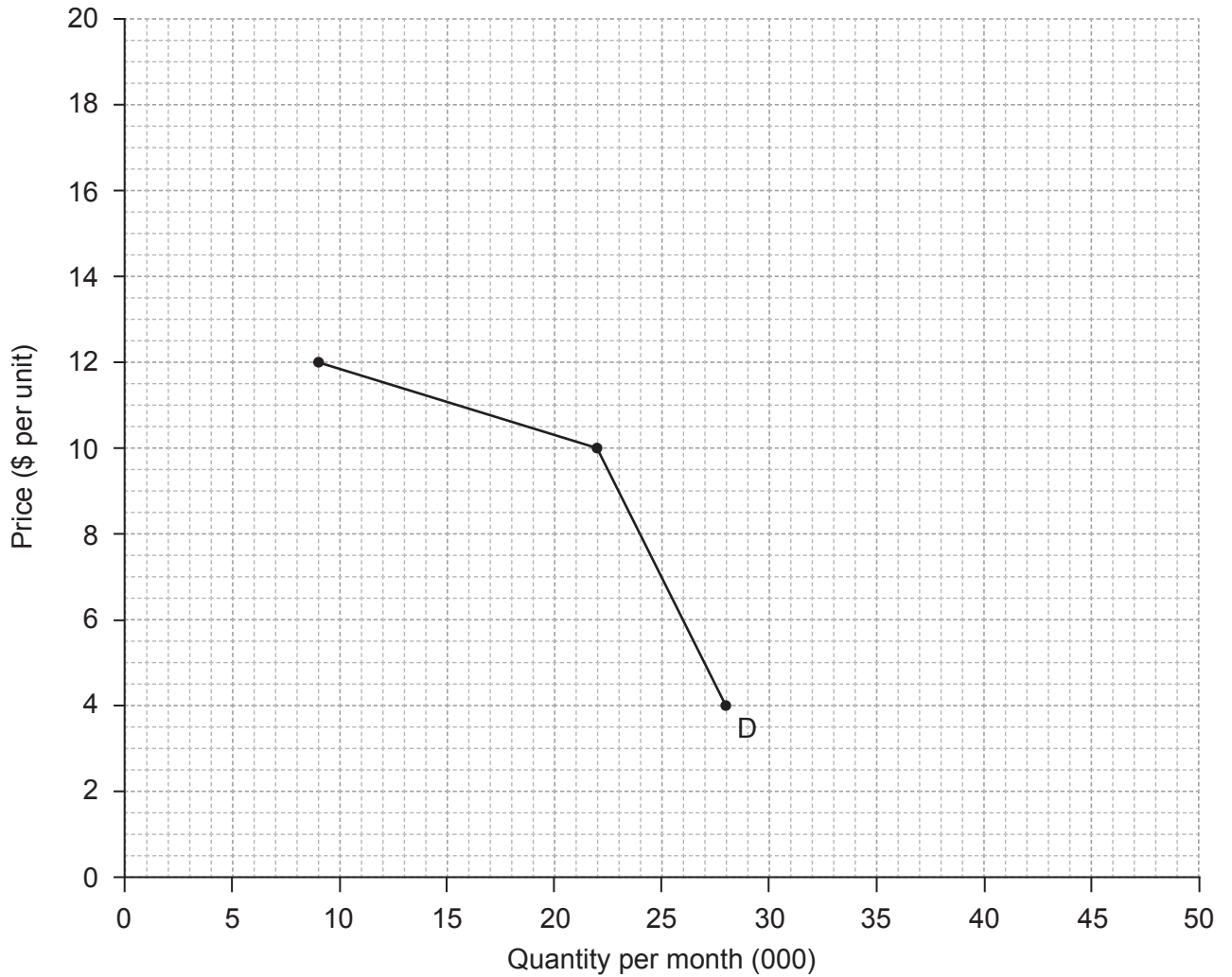Please **do not** write on this page.

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will not be marked.

(Question 1 continued)

The following diagram illustrates the demand conditions faced by Firm B, which operates in a non-collusive oligopolistic market structure. It currently charges a price of $10 per unit.

(e)   Define the term *non-collusive*.   [2]

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(Question 1 continued)

(f)　Calculate the price elasticity of demand if

(i)　price increases to $12;　　　　　　　　　　　　　　　　　　　[2]

(ii)　price decreases to $4.　　　　　　　　　　　　　　　　　　　[2]

(g)　Using the diagram and your answers to part (f), explain why price rigidities exist in non-collusive oligopolistic markets.　　　　　　　　　　　　　　　[4]

2. The following diagram illustrates the aggregate demand and short-run aggregate supply
    curves for Country A according to the monetarist/new classical model.

The full employment level of output for Country A is identified as $18 billion per year.
A decrease in consumer expenditure has led to a decrease in aggregate demand of
$9 billion.

(a)   (i)   Identify **two** possible reasons for a decrease in consumer expenditure.   [2]

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(Question 2 continued)

(ii) On the diagram, draw and label the new aggregate demand curve following the decrease in consumer expenditure. [1]

(iii) State the amount (in $ billion) by which the full employment level of output exceeds the short-run equilibrium level of output. [1]

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(iv) On the diagram, draw and label the long-run aggregate supply curve for Country A. [1]

(v) Identify the average price level and level of real output when Country A has returned to long-run equilibrium as a result of the interaction of market forces. [1]

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(b) Explain, giving **two** reasons, why the aggregate demand curve has a negative slope. [4]

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(Question 2 continued)

(c) The government of Country A has decided to implement an expansionary fiscal policy. Direct income tax will be reduced in 2016 as illustrated in the following table.

Income ($ per year)	Rate of income tax (2015)	Rate of income tax (2016)
1–8000	0 %	0 %
8001–22 000	10 %	8 %
22 001–38 000	20 %	16 %
38 001 and over	32 %	25 %

(i) Calculate the income tax paid in 2015 by an individual earning $65 000 per year. [2]

(ii) Calculate the average rate of tax paid by the individual in 2016 (assuming the individual's income remains the same as in 2015). [3]

(iii) Explain why a decrease in the rate of direct tax would affect the value of the multiplier in Country A. [2]
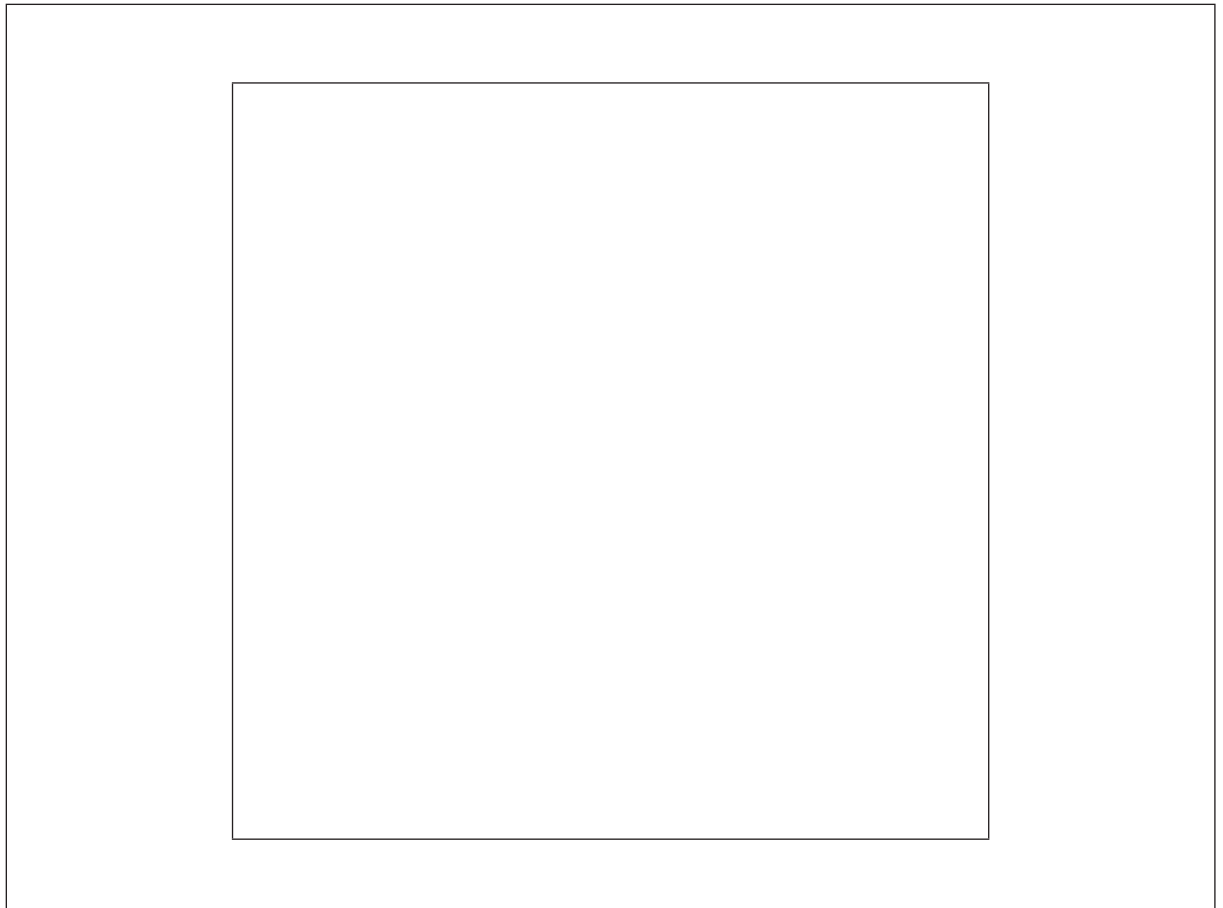
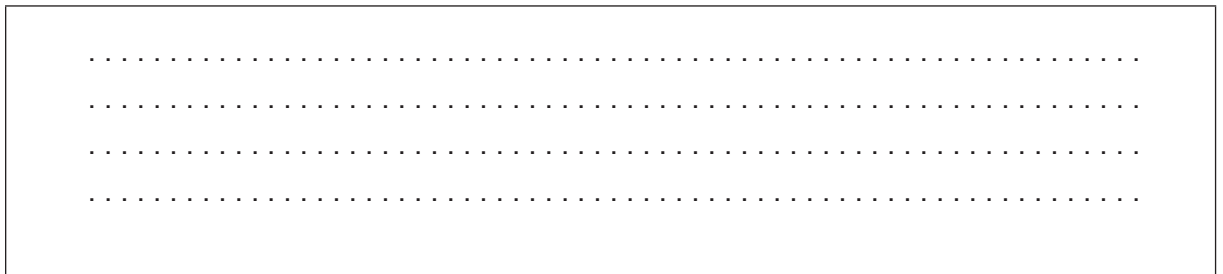**(This question continues on the following page)**

(Question 2 continued)

In Country A an indirect tax of 15 % is imposed on all goods and services purchased. Some economists have argued that reducing the indirect tax would be preferable to reducing income tax, due to the likely effects on the distribution of income.

(d) (i) In the following box, sketch and label a Lorenz curve for Country A to show the likely effects on the distribution of income if the rate of indirect tax is reduced. [2]

(ii) With reference to your diagram in part (d)(i), explain how the Gini coefficient would be derived. [2]

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(Question 2 continued)

(e) Explain how the reductions in the rates of income tax in 2016 specified in part (c) may affect equity in the distribution of income in Country A. [4]

3. A Thai student decides to study at a university in Australia. The current market exchange rate is **AU$1.00=THB30.61** where AU$ is the Australian dollar and THB is the Thai baht. Assume that the annual tuition fees are AU$18450 and that the student expects annual living expenses to be AU$950.

(a) Calculate the annual expected total expenses measured in Thai baht. [2]

When arriving in Australia, the student discovers that the Australian dollar has appreciated against the Thai baht by 6.25%.

(b) Calculate the new exchange rate. [2]

(c) Calculate the increase in Thai baht needed to pay for tuition and living expenses during the first year of studies as a result of the currency appreciation. [2]
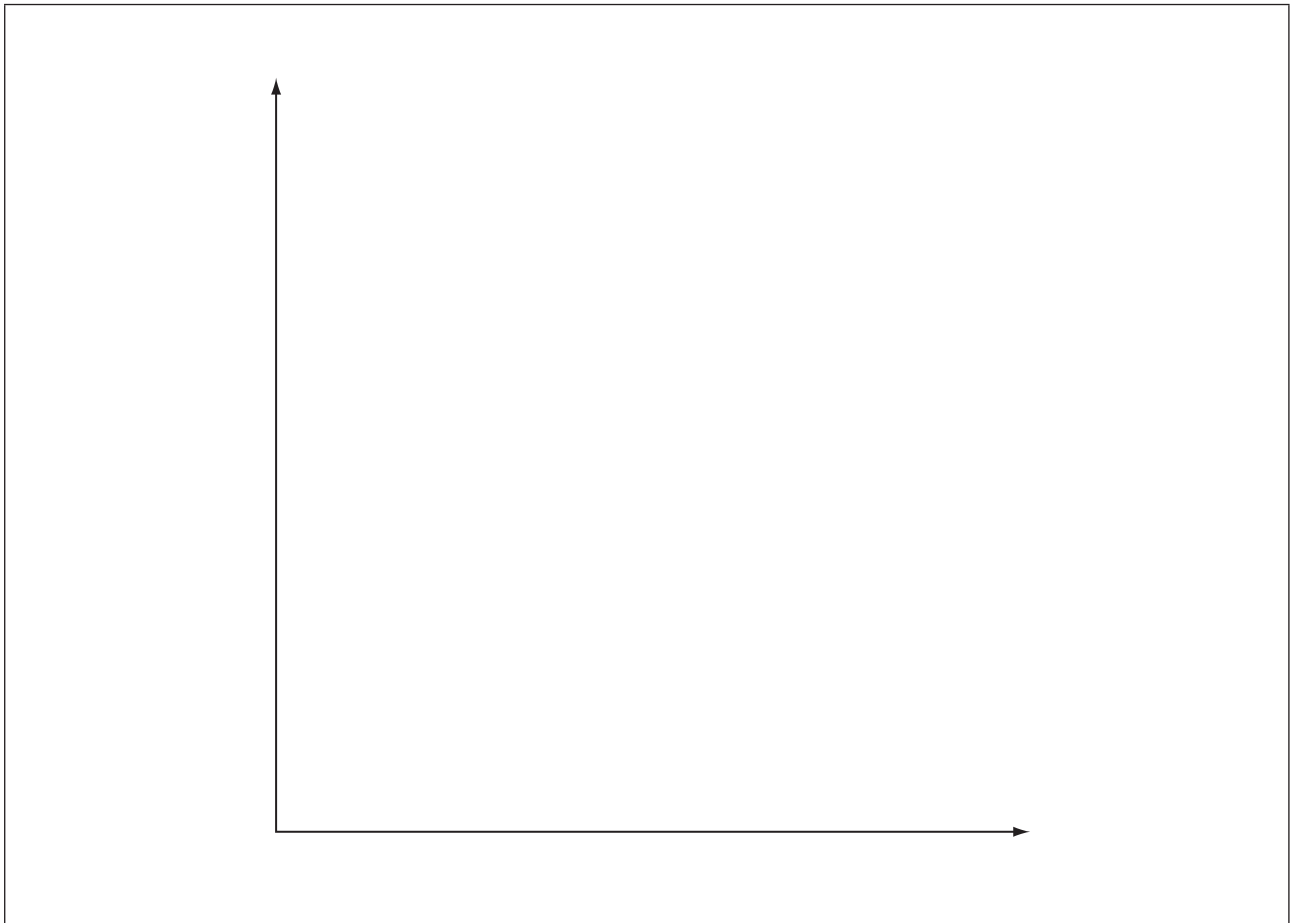
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(Question 3 continued)

(d)   Sketch on the following axes a fully-labelled diagram illustrating the appreciation of the Australian dollar.   [2]

(e)   Using the diagram you have drawn in part (d), explain **two** reasons for which the Australian dollar may have appreciated against the Thai baht.   [4]

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(Question 3 continued)

Assume that the Reserve Bank of Australia (The Central Bank of Australia) operated a managed float.

(f)   Define the term *managed float.* [2]

(g)   State **one** action the Reserve Bank of Australia could take to prevent a further appreciation of the Australian dollar. [1]

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(Question 3 continued)

Now consider another country, Sweden. The following table illustrates the indices of average export and import prices between 2009 and 2011.

	Index of export prices	Index of import prices	Terms of trade
2009	100	100	100
2010	93.80	98.91	
2011	83.56	98.23	

(h)　Using 2009 as the base year, calculate Sweden's terms of trade for 2010 **and** 2011. Enter your results in the table. [2]

(i)　Describe the meaning of the change in Sweden's terms of trade between 2009 and 2011. [2]

(j)　State **two** possible reasons for a change in the terms of trade of a country such as Sweden. [2]

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(Question 3 continued)

(k) Explain how the change in Sweden's terms of trade, described in part (i), might improve its current account balance. [4]

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