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Pearson Edexcel
Level 3 GCE

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Economics B

Advanced Subsidiary

Paper 2: The wider economic environment

Thursday 17 May 2018 – Morning

Time: 1 hour 30 minutes

Paper Reference

8EB0/02

You do not need any other materials.

Total Marks

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 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.*
- Calculators may be used.

Advice

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

Turn over ►

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Answer ALL questions.

SECTION A

Read the following extracts (A and B) before answering Question 1.

Write your answers in the spaces provided.

Extract A

Crisp maker hit by price rises

Manufacturer Nimisha Raja has been following the foreign exchange markets more closely than usual since the Brexit referendum. She makes dried fruit and vegetable crisps called *Nim's Fruit Crisps* at a factory in Kent. Buying ingredients from abroad has become a lot more expensive since the Brexit vote sent the pound sterling falling against the euro, the dollar and other currencies.

5

Like other manufacturers who buy materials from abroad, Nimisha has had to decide whether to lower profit margins, charge more to retailers or change her products. "On the whole, because we have lean production we can change things as and when we need to," says Nimisha. "We have had to be pragmatic and flexible."

10

Nimisha opened her factory a year ago and has been in talks with high street retailers and supermarkets about selling her crisps. She has had to deal with changes in the price she pays for pineapples (from 55p per kilo to 70p per kilo) while watermelons went from 60p to 90p.

Nimisha has just signed a deal with one retailer. Instead of passing on the increased cost of production of pineapple products, she will accept a lower profit margin. The higher costs of imported fruit has made Nimisha look at using more UK-grown local fruit than before. The company has also invested in a new pineapple peeling machine to cut its production costs and help offset higher import prices.

15

As for many other manufacturers, the pound's weakness has a silver lining. Export demand has gone up. "It's been quite amazing," she says. "We have had emails in the last couple of weeks from Lithuania, Italy, France, Belgium and Hong Kong. I also intend to introduce and export new products, but I just have to make sure it's not from imports but from local produce."

20

(Source: adapted from <https://www.theguardian.com/business/2016/dec/13/we-have-to-be-nimble-and-pragmatic-crisp-maker-hit-by-price-rises>)

Extract B

Value of £1 sterling, expressed in Dollars and Euros, monthly averages for 2016

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
US \$	1.44	1.43	1.42	1.43	1.45	1.42	1.31	1.31	1.31	1.24	1.25	1.25
Euro €	1.33	1.29	1.28	1.26	1.28	1.27	1.19	1.17	1.17	1.12	1.15	1.19

(Source: adapted from <http://www.ukforex.co.uk/forex-tools/historical-rate-tools/monthly-average-rates>)



- 1 (a) What is meant by the term 'imports'?

(2)

Imports are goods or services that are bought by consumers, firms or the government of one country (the UK) but are produced in another country, so money flows out of the UK to pay for them.

In December 2016, Nim's Fruit Crisps produced 84,250 packets of fruit crisps. The production line can produce 125,500 packets per month.

- (b) Calculate, to 2 decimal places, the capacity utilisation in December 2016. You are advised to show your working.

(4)

$\text{Capacity utilisation} = (\text{current output} \div \text{maximum potential output}) \times 100$

$= (84,250 \div 125,500) \times 100$

$= 0.671314 \times 100$

$= 67.13\%$

Capacity utilisation in December 2016 = 67.13%



(c) Explain **one** way Nim's Fruit Crisps could improve its capacity utilisation.

(4)

One way is to enter new markets abroad by exporting. Extract A states that Nim's Fruit Crisps has had emails from Lithuania, Italy, France, Belgium and Hong Kong since the pound fell, and Nimisha intends to introduce and export new products made from local produce.

Selling to these new overseas markets would increase demand for its fruit crisps, so the firm would produce more packets each month using its existing factory and production line. As output rises closer to the maximum of 125,500 packets with the same resources, capacity utilisation rises above 67.13% and fixed costs are spread over more units.



(d) Discuss whether using lean production will help Nim's Fruit Crisps achieve a competitive advantage.

(8)

Lean production is an approach to production that aims to minimise waste of resources such as materials, time and stock while improving quality, using methods such as just-in-time (JIT), Kaizen (continuous improvement), total quality management (TQM) and short lead times. A competitive advantage is an advantage a firm has over its rivals, such as lower prices or a better product, that allows it to win more sales.

Extract A states that, because Nim's Fruit Crisps uses lean production, it "can change things as and when we need to" and is "pragmatic and flexible". This flexibility and speed of production means it can respond quickly to changing demand, for example new export orders, or change its products when import prices rise, which larger, less flexible crisp makers may struggle to do.

Lean production also cuts costs. The firm has invested in a new pineapple peeling machine to cut its production costs, and holding little stock under JIT reduces storage costs and waste of perishable fruit. Lower unit costs mean the firm can either keep prices low, making its crisps more price competitive than other crisp manufacturers and raising sales, or protect its profit margin while the fall in the pound raises the cost of imported fruit from 55p to 70p per kilo for pineapples.

However, lean production alone may not be enough to give a competitive advantage. If consumers do not like the taste of the crisps, or the price is still higher than branded rivals, sales will not rise. JIT also needs frequent deliveries of small quantities of fresh fruit, which raises transport costs and may add to the overall cost of production. If there is a break in the supply chain of fresh fruit, for example a delay with imported pineapples, the firm holds no buffer stock and will find it very difficult to make the crisps and maintain revenue.

Overall, lean production is likely to help Nim's Fruit Crisps gain a competitive advantage



through flexibility and lower costs, especially as a small new firm, but it depends on having reliable local suppliers and a product that consumers value, so it is a source of advantage rather than a guarantee of one.

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- (e) Using the data in Extract B, assess the extent to which the depreciation of the pound sterling (£) will have an impact on UK manufacturers such as Nim's Fruit Crisps.

(12)

A depreciation is a fall in the value of a currency against other currencies over time. A weaker pound makes UK exports cheaper in foreign currency, so they become more competitive, and makes imports more expensive in pounds.

Extract B shows the pound fell sharply after the Brexit vote in June 2016. Against the euro it fell from €1.33 in January to a low of €1.12 in October, a fall of $(1.33 - 1.12) \div 1.33 \times 100 = 15.79\%$. Against the US dollar it fell from a high of \$1.45 in May to a low of \$1.24 in October, a fall of 14.48%.

For manufacturers that import raw materials, this raises costs. Nim's Fruit Crisps pays more for imported fruit: pineapples rose from 55p to 70p per kilo (27.27%) and watermelons from 60p to 90p (50%). Higher costs of production either reduce profit margins, as Nimisha has accepted on her retailer deal, or must be passed on in higher prices, which may reduce sales. This reduces the overall profitability of UK manufacturers that rely on imports.

On the other hand, exporters benefit. A product priced at £1 cost a French buyer about €1.33 in January but only €1.12 in October, so demand for UK exports rises and their total revenue increases. Extract A states that export demand for Nim's Fruit Crisps has gone up, with emails from France, Italy, Belgium, Lithuania and Hong Kong, so the firm could increase sales and use more of its spare capacity. Firms can also switch to cheaper UK-grown fruit, as Nimisha is doing, which reduces the cost impact of the depreciation.

However, the extent of the impact depends on several factors. First, it depends on whether a firm imports, exports or does both: Nim's Fruit Crisps does both, so higher import costs partly offset the gains from exports. Second, it depends on price elasticity



of demand: if demand for UK exports is price inelastic, or the product has few substitutes, the lower foreign price will not raise sales by much, and firms with inelastic demand may pass on higher costs without losing many sales. Third, the actions of competitors matter, as rival firms in Europe may cut prices to stay competitive. Finally, it depends on the size and duration of the depreciation. Extract B shows the pound recovered slightly against the euro to €1.19 in December, so if the depreciation is short term, firms may not find it worth entering new export markets, and many manufacturers hedge their currency purchases, so cost increases take time to appear. Overall, the depreciation is likely to have a significant impact because the fall of around 15% is large, but the net effect on a UK manufacturer depends on the balance between imported inputs and exports. For Nim's Fruit Crisps the negative cost impact is significant in the short run, but in the long run the boost to exports and the switch to local fruit may make the depreciation beneficial.

(Total for Question 1 = 30 marks)

TOTAL FOR SECTION A = 30 MARKS



SECTION B

Read the following extracts (C and D) before answering Question 2.

Write your answers in the spaces provided.

Extract C

Selected UK data for May-Nov 2016

	May	Jun	Jul	Aug	Sept	Oct	Nov
Annual % change in average nominal earnings	2.3	2.5	2.4	2.4	2.4	2.6	2.8
Consumer Price Index (% change)	0.3	0.5	0.6	0.6	1.0	0.9	1.2
Interest (base) rate (%)	0.5	0.5	0.5	0.25	0.25	0.25	0.25

(Source: adapted from <https://www.ons.gov.uk>)

Extract D

Train fares to increase by 2.3% in 2017

From January 2017, train fares across the UK are set to increase by an average of 2.3%. The increase covers both regulated fares, such as peak-rate season tickets which account for 40% of all train journeys, and unregulated fares, such as off-peak leisure tickets which account for 60%. While the rise in regulated fares has been capped at 1.9%, other unregulated fares have no cap and will rise by considerably more than 2.3%. 5

Lianna Etkind, from the Campaign for Better Transport, condemned the increase, warning that some passengers are "finding themselves priced off the railways. Between 1995 and 2016, passengers have seen average fares increase by 23.5% and much more needs to be done by train operators and the government to give them a truly affordable railway." 10

Paul Plummer, from the Rail Delivery Group, the industry body responsible for the increase, acknowledged that passengers were likely to be disappointed with the decision. He said: "We understand how passengers feel when fares go up, and we know that in some places they haven't always got the service they pay for. Rail companies are working together to deliver more than £50bn of improvements, including £11.6bn being spent on more than 5,500 new train carriages by the end of 2020." 15

Transport Secretary Chris Grayling added: "We are delivering the biggest rail modernisation programme for more than a century, providing more seats and services. We have always fairly balanced the cost of this investment between the taxpayer and the rail passenger." 20

Mick Cash, from the RMT union, called the announcement, "another kick in the teeth for British passengers. Travellers in the UK pay some of the highest fares in Europe to travel on packed out and unreliable trains with rip-off private train companies laughing all the way to the bank."

(Source: adapted from <https://www.moneyexpert.com/transport/train-fares-increase-2-3-next-year/>)



2 (a) What is meant by the term 'Consumer Price Index'?

(2)

The Consumer Price Index is a weighted index and a measure of inflation, which measures the average change in the prices of a typical basket of goods and services bought by households over time.

(b) Using Extract C, calculate the change in average real earnings for November 2016. You are advised to show your working.

(4)

Change in real earnings = % change in nominal earnings – % rate of inflation (CPI)

November 2016: nominal earnings = 2.8%, CPI inflation = 1.2%

= 2.8% – 1.2%

= 1.6%

Average real earnings rose by 1.6% in November 2016.



(c) Using Extract C, explain **one** impact of rising inflation on individuals with savings.

(4)

Rising inflation means savings lose their real value. Extract C shows that in November 2016 CPI inflation increased to 1.2%, whereas the interest (base) rate had been cut to 0.25% in August.

Because the rate of inflation is greater than the rate of interest, the real interest rate is negative ($0.25\% - 1.2\% = -0.95\%$). For example, £1,000 of savings earns only about £2.50 interest in a year while prices rise by 1.2%, so the savings can now buy fewer goods and services than before. Their purchasing power falls, which may discourage saving.

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- (d) Discuss how price elasticity of demand might affect train operators' revenues following an increase in the price of rail tickets.

(8)

Price elasticity of demand (PED) measures the responsiveness of quantity demanded to a change in price. Total revenue is price multiplied by the quantity sold. When demand is price inelastic (PED less than 1), a rise in price leads to a proportionately smaller fall in quantity demanded, so total revenue increases. When demand is price elastic (PED greater than 1), a rise in price leads to a proportionately larger fall in quantity demanded, so total revenue falls.

Demand for peak-rate season tickets is likely to be price inelastic. Commuters must get to work at fixed times and have very few substitutes, as driving into city centres is slow and parking is expensive, and the cost is a necessity for their job. Therefore, if regulated fares rise by 1.9%, the quantity demanded will fall by much less than 1.9%, so train operators' revenue from these tickets will increase. As these tickets account for 40% of all journeys, this is a large boost to revenue.

However, off-peak leisure tickets account for 60% of all journeys and have no cap, so they will rise by considerably more than 2.3%. Demand for these is likely to be more price elastic, because leisure travellers are more price sensitive, can choose not to travel, and have substitutes such as coaches, cars and cheap flights. A large price rise could cause a proportionately larger fall in leisure journeys, so revenue from off-peak tickets may fall, and some passengers will be "priced off the railways" as Lianna Etkind warns.

Overall, the impact on train operators' revenues depends on the proportion of peak and off-peak tickets sold and the size of the PED for each. On many routes, especially commuter routes into London, inelastic peak demand will dominate and revenue is likely to rise. In the long run, however, demand becomes more elastic as passengers find alternatives such as working from home or moving jobs, so repeated fare rises above inflation may reduce revenue over time.



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(e) Assess the economic benefits of increased investment in the UK rail network.

(12)

Investment is spending on capital goods, and it is a component of aggregate demand:

$AD = C + I + G + (X - M)$. Extract D states that rail companies are delivering more than £50bn of improvements, including £11.6bn on more than 5,500 new train carriages by the end of 2020.

In the short run, this investment is an injection into the circular flow of income, so AD increases, raising real output and economic growth. Through the multiplier effect, the incomes earned by firms building carriages and track and their workers are spent again, so the final rise in GDP is larger than the initial £50bn.

There could also be an increase in employment. More workers are needed to build the new infrastructure, and more train drivers and rail staff will be needed to operate the extra services, which reduces unemployment and raises incomes and tax revenue.

In the long run, investment in infrastructure increases the productive capacity of the economy (LRAS shifts right). A faster, more reliable rail network lets UK businesses transport raw materials and finished goods quickly to other parts of the country, raising efficiency and productivity and making UK goods more competitive compared with other countries. It also gives commuters more choice of how to travel, reducing overcrowding on trains and congestion on the roads, which cuts wasted time and pollution. Workers gain better access to jobs in different parts of the country, which helps to reduce geographical immobility of labour.

However, there is an opportunity cost. The government shares the cost with the taxpayer, so the money could have been spent on the NHS or education instead, which may give greater benefits. Many argue the investment should be funded solely by the train companies, as Mick Cash says they are making large profits, rather than passengers paying higher fares. Some argue the investment should be in the digital

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economy, such as broadband, rather than traditional infrastructure.

In addition, large-scale rail investment takes a long time to benefit the economy because of the size and scale of the projects needed after years of under-investment, so most supply-side benefits may not appear until well after 2020, and projects often run over budget. The benefits also depend on how much is invested and where: £50bn spread across the whole network may only reduce overcrowding slightly.

Overall, increased rail investment is likely to bring significant economic benefits, as it raises both AD in the short run and productive capacity in the long run. However, the size of the benefit depends on the efficiency of the spending and its opportunity cost, and rail is only one of many factors, such as global trade, that determine UK economic growth.

(Total for Question 2 = 30 marks)

TOTAL FOR SECTION B = 30 MARKS



SECTION C

Read the following extract (E) before answering Question 3.

Write your answer in the space provided.

Extract E

Spain wakes up to risk posed by long-term joblessness

Spain's economic recovery remains on track and the unemployment rate continues its long retreat from a peak of 27% in 2013 and decreased to 18.9% in October 2016. However, the long-term unemployed, the category which includes all job seekers who have been out of work for more than a year, has struggled to benefit from the recovery. In Spain, one in four unemployed people have been jobless for more than four years.

5

"Long-term unemployment is starting to emerge as a policy priority in Europe. It imposes not just huge economic and emotional stress on those affected but is also likely to have a big impact on the recovery," said Marcel Jansen, an economics professor at Madrid's Autónoma University. The problem, he adds, is that "high long-term unemployment will transform into high structural unemployment."

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In other words, even if the Spanish economy continues to improve in the years ahead, Spain will struggle to reduce jobless numbers beyond a certain point, unless it finds ways to make the long-term unemployed employable again.

Official data shows Spanish workers who have been out of a job for more than two years are much less likely to find new employment than others. Over the past three years their number has declined just 16% while the overall number of jobless people fell 27% over the same period. After years of neglect, the government is finally paying attention. Last week, it announced a €515m action plan that aims to provide individualised support for the long-term unemployed aged 30-54.

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"There are people who are long-term unemployed and they are only in their 20s. They will be around, looking for work for another 40 years, so it would pay hugely if we managed to reconnect them with the labour market," said Mr Jansen. "Spain cannot afford to turn its back on them."

(Source: adapted from <https://www.ft.com/content/e582f902-bbac-11e6-8b45-b8b81dd5d080>)

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- 3 Using Extract E, evaluate the likely impact of unemployment on the Spanish economy.

(20)

Unemployment refers to people who are willing and able to work at the going wage rate but cannot find a job despite actively searching for work. Long-term unemployment means being out of work for more than a year. Extract E shows Spain's unemployment rate has fallen from a peak of 27% in 2013 to 18.9% in October 2016, but this is still very high, and one in four unemployed people have been jobless for more than four years.

The first impact is a loss of potential output. Unemployed workers are an unused factor of production, so Spain produces inside its production possibility frontier and real GDP is lower than it could be. With nearly a fifth of the labour force out of work, this is a huge waste of resources and slows the recovery, as Marcel Jansen warns.

Secondly, high unemployment reduces incomes and consumer spending. Unemployed workers rely on state benefits, so they cut spending, particularly on luxury goods with high income elasticity of demand. This reduces aggregate demand, which reduces firms' sales and may lead to further job losses through the negative multiplier effect. It also increases poverty and inequality, as the gap widens between those in work and those reliant on benefits, and may cause social problems such as crime and social unrest, which the government must then spend money tackling. Jansen also notes the "huge economic and emotional stress" on those affected.

Thirdly, unemployment worsens the government's finances. Tax receipts fall, both direct taxes such as income tax and indirect taxes such as VAT as spending falls, while government spending on unemployment benefits rises. This increases Spain's budget deficit and national debt. The government has also had to fund a €515m action plan to provide individualised support for the long-term unemployed aged 30 to 54, which has an opportunity cost, as this money cannot be spent on health or infrastructure.



Fourthly, long-term unemployment may become structural unemployment, known as hysteresis. Extract E states that "high long-term unemployment will transform into high structural unemployment". The longer people are out of work, the more their skills become out of date, they lose motivation and employers see them as less employable.

Official data shows that the number of people out of work for more than two years fell by only 16% over three years, compared with 27% for all jobless people. This means Spain will struggle to reduce unemployment beyond a certain point even as the economy grows, so the natural rate of unemployment rises and long-run growth is lower. It will require government investment in education and training to make these workers employable again.

Finally, there may be emigration of skilled and younger workers, as many young Spanish people leave to search for work in countries such as the UK or Germany. This reduces Spain's potential labour force and future output, and the government loses its investment in their education. Jansen points out that the young long-term unemployed could be looking for work for another 40 years.

However, unemployment may have some positive effects on the economy. High unemployment reduces inflationary pressure because there is spare capacity and less demand-pull inflation. With a large pool of workers available, wage pressures are lower, which reduces costs for Spanish businesses and could improve their overall profitability. Lower inflation and lower unit labour costs make Spanish exports more price competitive, which could help the recovery through higher net exports. Lower wage growth could also attract foreign direct investment (FDI) to Spain, as multinationals look for a cheap and available labour force, creating jobs in the long run.

The size of these benefits is limited, though. Long-term unemployed workers may not have the skills that firms and foreign investors need, so the large pool of labour may not be a real advantage, and in the eurozone Spain cannot devalue its currency to



boost exports, so it relies on lower wages, which squeezes living standards.

In conclusion, the likely impact of unemployment on the Spanish economy is mainly negative, with lost output, lower AD, a worse budget deficit and rising inequality. The most serious impact is long-term: the risk that long-term unemployment becomes structural, which permanently reduces Spain's productive capacity. The extent of the impact depends on how effective the government is in tackling it. The €515m plan is a positive step, but it is small relative to the problem and excludes the young long-term unemployed, so unless training and support are extended, unemployment is likely to hold back Spain's recovery for many years even though cyclical unemployment is falling.

(Total for Question 3 = 20 marks)

TOTAL FOR SECTION C = 20 MARKS
TOTAL FOR PAPER = 80 MARKS



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