Write your name here

Surname	Other names

Pearson Edexcel
Level 3 GCE

Centre Number	Candidate Number

Economics A

Advanced
Paper 3: Microeconomics and macroeconomics

Sample assessment material for first teaching
September 2015
Time: 2 hours

Paper Reference
9EC0/03

You must have a calculator.

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.
- There are two sections in this question paper.
- In Section A, answer **all** of questions 1(a) to 1(c) and one question from 1(d) or 1(e).
- In Section B, answer **all** of questions 2(a) to 2(c) and one question from 2(d) or 2(e).
- Answer the questions in the spaces provided
  – *there may be more space than you need.*
- Calculators may be used.

Information

- The total mark for this paper is 100.
- The marks for **each** question are shown in brackets
  – *use this as a guide as to how much time to spend on each question.*

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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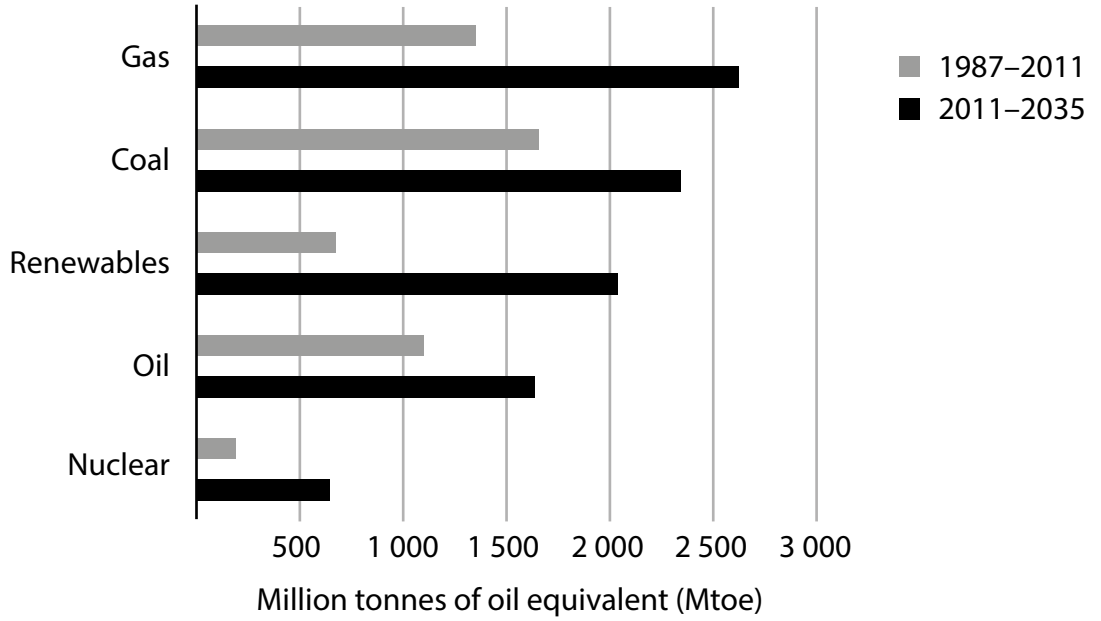
SECTION A

Read Figures 1 to 4 and the following extracts (A and B) before answering Question 1.

Answer ALL questions 1(a) to 1(c), and EITHER Question 1(d) or 1(e).

Write your answers in the spaces provided.

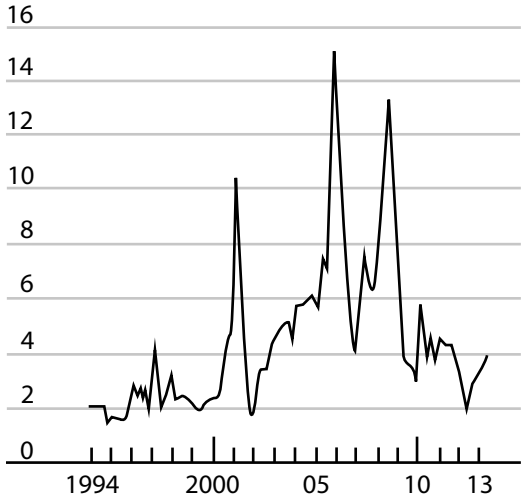
Energy



(Source: http://www.worldenergyoutlook.org/media/weowebsite/factsheets/WEO2013_Factsheets.pdf)

Figure 1

Global energy usage 1987–2011; forecast global energy demand 2011–2035



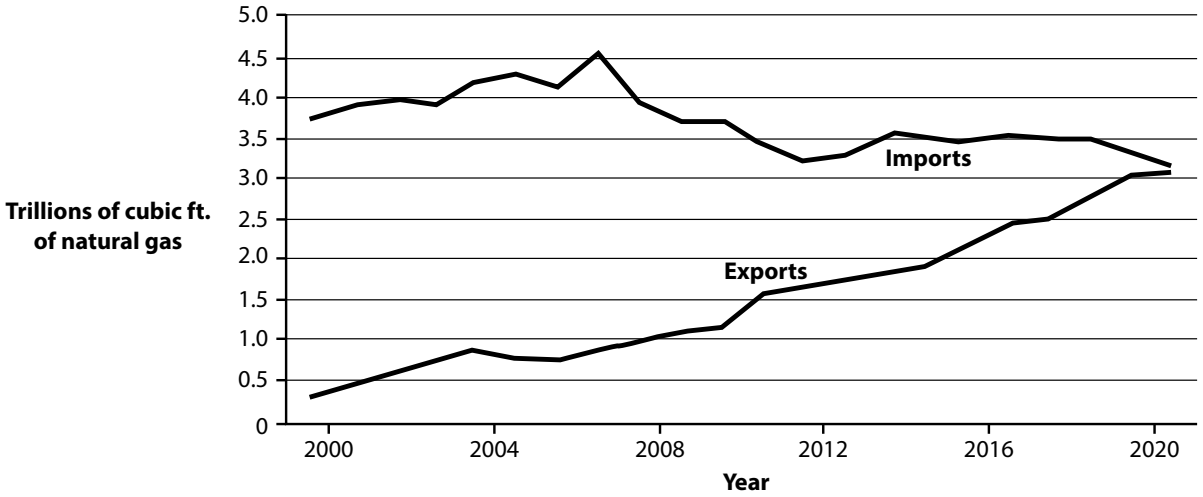
(Source: May 17, 2013. US energy revolution gathers pace by Ed Crooks in New York, Jonathan Soble in Tokyo and Guy Chazan in London. http://www.ft.com/cms/s/0/22516820-beca-11e2-a9d400144feab7 de.html#axzz2p4eufhXS)

Figure 2

USA natural gas production cubic feet (trillion)

Figure 3

USA natural gas price ($ per million thermal units)



(Source: http://www.wired.com/business/2012/08/mf_naturalgas/all/)

Figure 4

Natural gas is becoming a major export of the USA

Extract A

Britain needs to embrace the global shale gas revolution

Britain is sitting on a massive amount of untapped energy in the form of shale gas trapped deep underground and yet is failing to make use of this resource. To make matters worse, politicians have imposed ever higher energy costs on the public thanks to a combination of higher taxes and environmental rules. These have hit the poor, contributing to declining real incomes, crippling manufacturing companies and exporting jobs to other countries. It is time to change our current energy policy and begin to exploit the UK's onshore shale gas reserves, which could deliver a vast amount of cheaper, cleaner energy. Two years ago, experts put these at 5.3 trillion cubic feet (tcf) but it now seems that the British Geological Survey will significantly increase this estimate, possibly to as much as 200 tcf. Exploration companies claim to have identified resources of nearly 300 tcf so far. Offshore reserves, which are much harder to extract profitably, could be as much as 5–10 times larger.

A report from the Institute of Directors states that the benefits of embracing shale gas would be greater than the costs. The USA is leading the way: shale gas now accounts for an astonishingly high 23% of domestic gas production and 22% of gas consumption. Energy prices have gone down for US consumers and companies, at a time when they have gone up in Britain, delivering a major competitive advantage to US firms and further damaging UK industry. One side-effect of the shale revolution is that US natural gas prices no longer move in line with oil prices.

The impact of the USA's shale revolution is a success story that has gone largely unnoticed in the UK. The USA's economic problems would be far worse without it. By 2020, the shale gas boom is expected to create 3.6 million US jobs, both directly and indirectly thanks to lower energy costs. Carbon emissions are falling, as gas is substantially cleaner than coal. The Institute of Directors' report quantifies the potential boost to the British economy from shale gas. It calculates that 35 000 extra jobs would be created directly, helping to offset the decline in North Sea oil and gas. In addition, there would be enough onshore supply to meet 10% of our gas demand for the next 100 years, preventing the expected rise in costly gas imports. UK carbon emissions would also be cut by 8%.

What of the controversy surrounding fracking, the technique used to extract shale? The great worry is that it would cause earthquakes. That possibility certainly exists, and needs to be taken extremely seriously, yet in 2012, the UK experienced three earthquakes as large or larger than the bigger of the two earthquakes caused by fracking in 2011. Fortunately, none of these earthquakes caused any damage; few people even noticed them. A further concern is that fracking requires a considerable amount of water and may cause water contamination. All energy sources can be extremely dangerous, as we have learnt from oil spills and nuclear accidents. The trick with fracking is to use the safest methods, to engage in continuous monitoring of its effects and ensure that safety is paramount.

(Source: http://www.cityam.com/article/britain-needs-embrace-global-shale-gas-revolution revolution#sthash.9kSGrPUH.dpuf Allister Heath Cityam 21 September 2012)

Extract B

The impact of cheap shale gas

Cheap domestic gas will ultimately have three effects. First, it will delay or kill most new competing sources of electricity production – be they coal, nuclear, solar, or anything else. Gas is now incredibly cheap and easy to acquire, while other energy sources remain expensive or hard to get (or both). Not surprisingly, gas is already winning: coal is being pushed out, nuclear has stalled, and wind and solar projects are being cancelled.

Second, natural gas has become so cheap that it will win over some transportation markets. Trucks, buses, delivery vans, and a variety of commercial and fleet vehicles can all be converted to natural gas.

The third effect will be on greenhouse gas emissions. Most new power plants will run on natural gas. While this is cleaner than coal, it is obviously dirtier than nuclear, wind, and solar. Although some ageing coal plants will be replaced, decreasing overall CO_2 output, far more nuclear, solar, and wind plants will be deferred or cancelled in favour of gas operations. Moving to a gas-based power grid will almost certainly result in more greenhouse gas emissions over time. This is especially true when you factor in the inevitable gas that leaks in the production, shipping, and distribution process. As an agent of global warming, natural gas is 25 times more potent than $CO_{2,}$ so even a small leakage can have a large impact.

(Source: http://www.wired.com/business/2012/08/mf_naturalgas/all/)

1 (a) With reference to Figure 1, explain **one** possible cause of the forecast change in total energy use.

(5)

(b) With reference to Figure 4, examine the likely impact on the USA's circular flow of income of the trends in exports and imports of natural gas between 2000 and 2020.

(8)

(c) With reference to the information provided, discuss the likely impact of a change in the price of gas on the markets for solar energy and nuclear energy.

(12)

EITHER

(d) With reference to the information provided and your own knowledge, evaluate the possible microeconomic and macroeconomic effects on the UK economy of a decision by the government to encourage fracking.

(25)

OR

(e) With reference to the information provided and your own knowledge, evaluate the possible microeconomic and macroeconomic effects on the global economy of lower energy prices.

(25)

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 1(d)** ☐ **Question 1(e)** ☐

Write your answer here:

(Total for Question 1 = 50 marks)

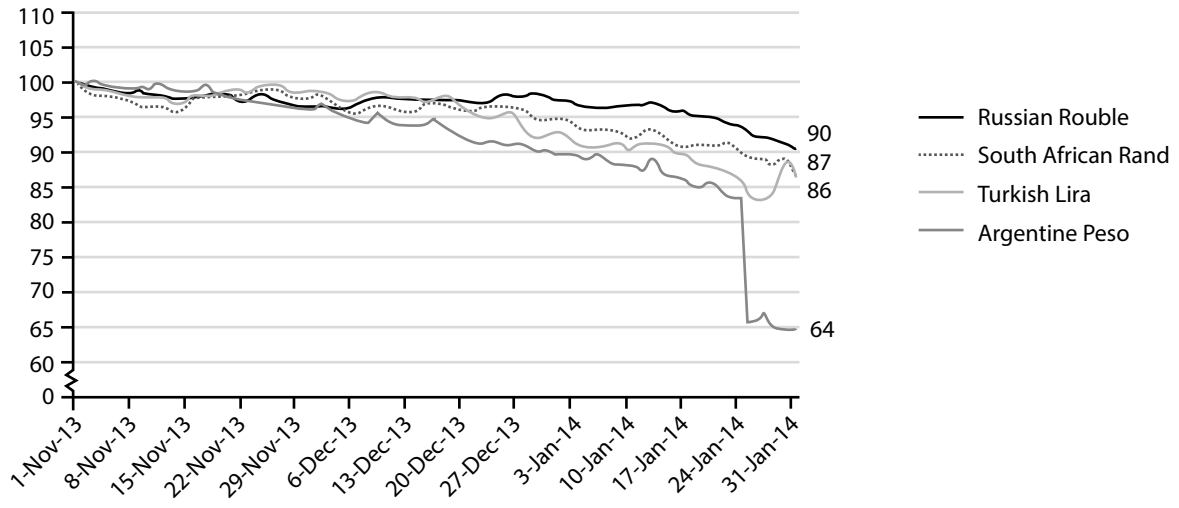
TOTAL FOR SECTION A = 50 MARKS

SECTION B

Read Figures 5 to 7 and the following extracts (C to E) before answering Question 2.

Answer ALL Questions 2(a) to 2(c), and EITHER Question 2(d) or 2(e).

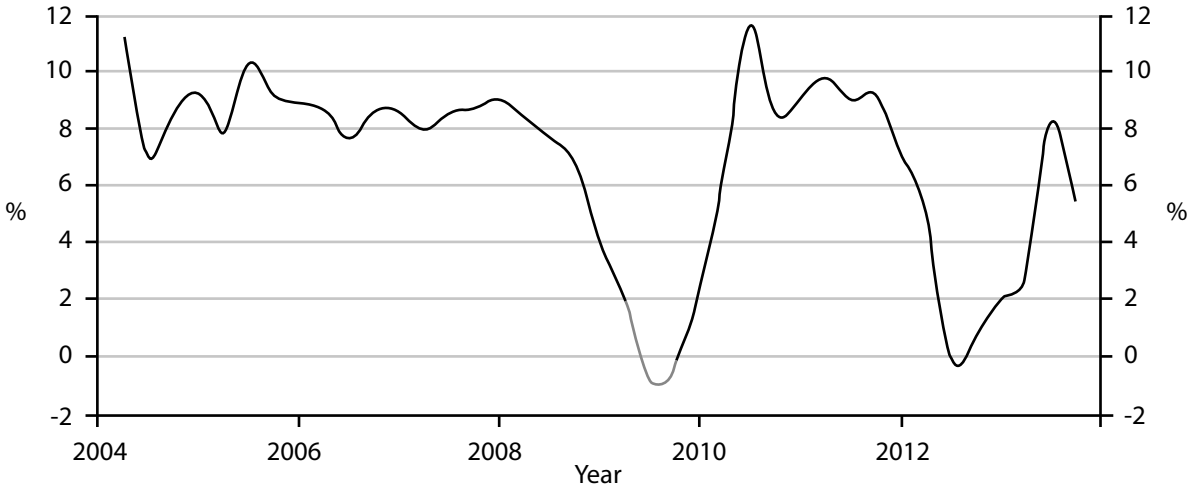
Write your answers in the spaces provided.



(Source: http://www.tradingeconomics.com/argentina/gdp-growth-annual)

Figure 5

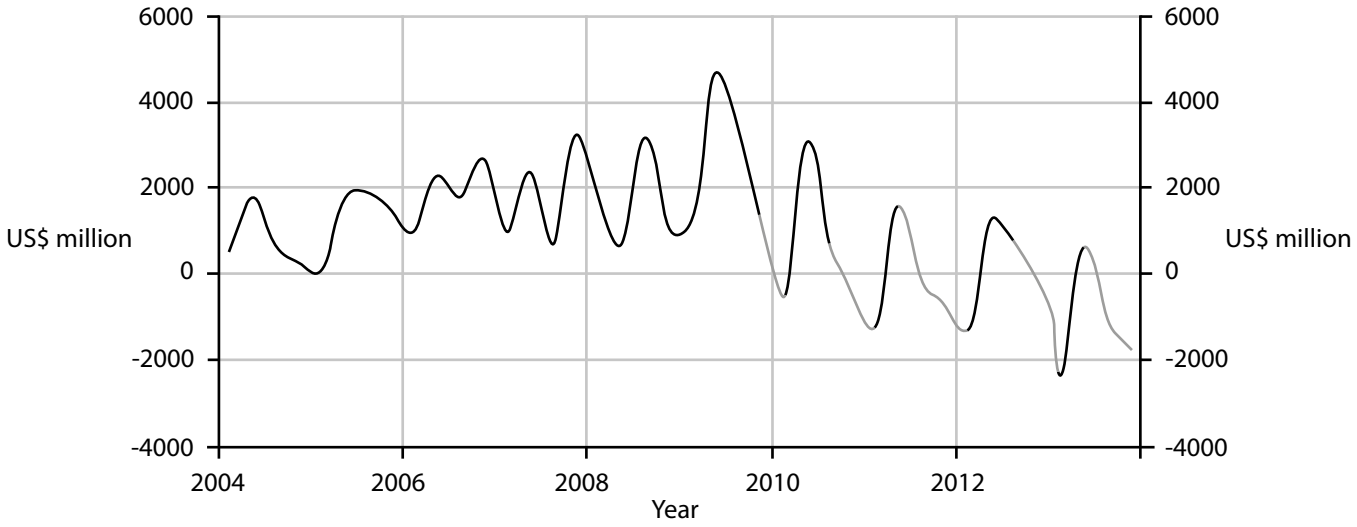
Emerging economies' exchange rates against the U.S. dollar (1st November 2013 = 100)



(Source: http://www.tradingeconomics.com/argentina/gdp-growth-annual)

Figure 6

Argentina's annual growth rate (% change in real GDP)



(Source: http://www.tradingeconomics.com/argentina/gdp-growth-annual)

Figure 7

Argentina's balance of payments on current account (US$ million)

Extract C

Fall in the exchange rates of emerging economies

In 2009, gross domestic product (GDP) in emerging economies grew by 3.1% on average, whereas it fell by 3.43% on average in advanced economies. Capital poured into emerging economies from investors looking to earn a reasonable rate of interest, to transnational corporations undertaking foreign direct investment.

However a slow-down in economic growth caused concerns which, in turn, led to panic. This resulted in the single biggest sell-off of emerging market currencies since 2009. In January 2014, the Argentine peso fell 23% after its central bank stopped intervening in the market to maintain its value. The Turkish lira fell 6% and only recovered slightly despite a rise in the central bank interest rate from 4.5% to 10%. Meanwhile, the Russian rouble fell by 7%.

There are two main causes of these currency depreciations: an announcement by the US Federal Reserve (the US central bank) that it would start reducing the amount of quantitative easing and the slow-down in the economies of emerging markets. In particular, there were reports of a fall in China's rate of economic growth. China is not only the world's largest emerging market economy but it is also the chief buyer of exports from other emerging markets.

(Source: http://www.forbes.com/sites/steveschaefer/2014/02/03/why-panic-prone-emerging-markets-are-breaking-down-in-2014/, 2 March 2014 by Steve Schaefer)

Extract D

Argentine government intervenes to prevent further fall of the peso

The Argentine government said in January 2014 that it would not let the peso fall any further after the authorities de-valued the currency by 23%. The devaluation is the latest and boldest attempt by President Cristina Fernández to stop capital flight, prevent a rapid decline in foreign reserves and avoid a balance of payments crisis. The exchange rate was just over 8 pesos to the dollar on 23 January 2014. Foreign reserves have fallen significantly over the past year.

Economists have welcomed the government's desire to remove currency controls aimed at managing the exchange rate. They also said that it did not get to the heart of the problem: the need to tighten monetary policy to slow soaring inflation, estimated by some economists to be over 25%. The government has recently sought to reduce the rate of inflation through price controls.

Argentina has a history of sudden devaluations. Many economists fear that the recent devaluation could fuel inflation further, as could a fresh round of wage bargaining. In 2013, police strikes over low wages that had not kept up with inflation led to widespread looting and social unrest.

Further problems include relatively low commodity prices which are reducing the balance of trade surplus. Further, the government's policy of printing money to fund social spending is increasingly unsustainable at a time when the fiscal deficit is growing.

(Source: FT.com January 24, 2014 Jonathan Gilbert, John Paul Rathbone and FT.com February 13, 2014, Benedict Mander)

Extract E

Argentine beef

One hundred years ago, beef made Argentina rich. Today it is making Argentines poor. On average, Argentines eat 64 kilos of beef a year, more than twice the amount eaten by consumers in the USA or Australia. The Argentine beef industry is suffering from the effects of government intervention in the industry and an unfavourable macroeconomic environment.

A 30% jump in beef prices between November 2013 and March 2014, led to a drop in consumption. "We are going to have to approve measures that once and for all defend consumers from abuse by powerful sectors, oligopolies and monopolies," stated President Fernández. She is attempting to impose price controls on almost 200 supermarket items, with threats of fines or closure for offending stores.

A cabinet minister threatened last month to step up intervention in the beef sector. This sector has already suffered almost a decade of export restrictions and price controls that have forced many cattle farmers out of business. By March 2014, restrictions introduced on beef exports since the devaluation have caused these beef exports to drop to 50% of January 2014 levels, despite the fact that rising global beef prices could have been advantageous for Argentine farmers. Over the past decade, government intervention has caused Argentina's stock of cattle to shrink to 48 million in 2011, a drop of 10 million. The country has fallen from its position as the world's third-biggest beef exporter to twelfth place, now lagging behind smaller neighbours Uruguay and Paraguay. Exports accounted for 20% of beef production in 2007, but have fallen to just 7% in 2013.

Under such conditions, many farmers have switched from raising cattle to growing soya, benefiting in particular from rising demand in China that has caused prices to soar. Soya exports have become fundamental to the Argentine economy as a major source of foreign exchange. Total agricultural production, including beef and soya, accounted for almost half of Argentina's $83 billion of exports in 2013, making it the country's single most important source of foreign exchange.

(Source: http://www.ft.com/cms/s/0/fc92f6d8-a462-11e3-9cb0-00144 feab7de.html#ixzz2ybYPbZlD 13 March 2014 by Benedict Mander)

2 (a) With reference to Figure 5 and Extract C, explain **one** likely reason for the fall in the exchange rate of the Turkish lira.

(5)

(b) Discuss the costs to the Argentine economy of an inflation rate "estimated by some economists to be over 25%". (Extract D, line 9)

(12)

(c) With reference to Extract E, examine the impact of restrictions on beef exports on how Argentine farmers decide to use their land.

(8)

EITHER

(d) With reference to the information provided and your own knowledge, evaluate the likely microeconomic and macroeconomic effects of the imposition of 'price controls' (Extract E, line 8) in Argentina.

(25)

OR

(e) With reference to the information provided and your own knowledge, evaluate the likely microeconomic and macroeconomic effects of the 23% devaluation of the Argentine peso.

(25)

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 2(d)** ☐ **Question 2(e)** ☐

Write your answer here:

(Total for Question 2 = 50 marks)

TOTAL FOR SECTION B = 50 MARKS
TOTAL FOR PAPER = 100 MARKS