2015 Preliminary Examination II
Pre-University 2

H1 ECONOMICS **8819/01**

Paper 1 **15 September 2015**

3 hours

Additional Materials: Answer Paper

READ THESE INSTRUCTIONS FIRST

Write your name and class on all the work you hand in.
Write in dark blue or black pen on both sides of the paper.
You may use a soft pencil for any diagrams or graphs.
Do not use staples, paper clips, highlighters, glue or correction fluid.

Section A
Answer **all** questions.

Section B
Answer **one** question.

You are reminded of the need for clear presentation in your answers.

Start each question on a fresh sheet of paper.

At the end of the examination, fasten your answers to the three questions **separately**.

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

Section A

Question 1

Australia’s Agriculture Sector

Extract 1: Challenges faced by Australian farmers

A near-perfect growing season for small farmers in two of Australia's biggest food belt regions - south-east Queensland and Victoria - has produced a bumper crop. But despite a bountiful yield, oversupply has driven down prices. It should be a time for celebration for growers, who have become hardened to a relentless cycle of droughts and floods in recent years. Instead many are complaining that they are being paid less at wholesale markets than the cost of harvesting their crops.

The number of farmers in Australia is shrinking, and it's not just the current domestic oversupply that is hurting the bottom line. The amount of imported fresh produce has reached record levels, and growers are facing unfair competition from overseas imports. Local farmers want prices to be set by the federal government to guarantee a decent return. If not, the sector will continue to contract.

In Queensland's sugar capital, Bundaberg, Mark Presser, a fourth generation cane farmer, enjoyed a record crop last year, and is on course to harvest another reasonable yield this time around. Yet he too feels besieged by falling prices and growing competition from overseas, most notably Brazil and India, where production costs are far less. He also complains about protectionism in Europe and the US.

Source: Adapted from *BBC News*, 31 October 2013

Extract 2: Milk is now cheaper than water

Domestic and international demand for dairy produce (cheese, yoghurt, butter etc) is booming, but the price of Australian milk has declined so far that it is now cheaper than water. In South West Victoria, which produces about a quarter of Australia’s milk, net farm incomes fell, with some farms running at an absolute loss. Not surprisingly, milk production is falling as farmers cull their herds and sell their farms (sometimes handing the keys to the bank). Milk processors are already experiencing shortages of supply, and this situation can be expected to worsen. However, even this isn’t leading to an increase in the farmgate price (the price paid by milk processors to dairy farmers for raw, unpasteurised milk), with milk processors being locked into long term contracts for cheap milk. As large supermarket chains (Woolworths and Coles) engage in a price war for milk, low domestic prices are driving up demand for fresh milk but there is no supply to satisfy it, meaning that even less is available for export.

What a contrast with the situation in New Zealand – their farmers receive around 50% more per litre for their milk, in an environment with much lower production costs. Milk production has doubled there over the past 10 years, with the result that the lucrative export markets in Asia are being gobbled up by the New Zealanders, while Australia is being left out in the cold. Some plausible explanations include a relative weaker currency that helps boost New Zealand farmers’ export competitiveness, the absence of drought compared with Australia, and the less intense competition for land, labour and expertise amongst domestic industries (unlike Australia which draw resources away from dairy towards higher returning industries such as mining during the resources investment boom).

Source: Adapted from *The Guardian*, 17 December 2013

Extract 3: Australia's dairy future is bright

It is true that the Australian dairy industry has been buffeted by the perfect storm in the last decade: severe drought, the global financial crisis, a persistently high Aussie dollar, rising costs for feed and depressed milk prices. It's been rough ride, but the majority of the country's dairy farmers have by and large weathered the tempest by adjusting their businesses to meet these challenges. It is farmers' responsibility to take up the challenge of adopting and adapting new techniques and technologies to ensure they are profitable.

The fact is, the Australian dairy industry remains a A$13bn manufacturing and export industry that employs 43,000 Australians directly on farms and in milk factories in towns where they are often the economic mainstay. Dairy is also the third largest agricultural industry in Australia and the largest in Victoria. Exports in 2012-13 were worth A$2.76bn. The world thinks Australian dairy has so much to offer that they want to invest in the industry to supply new markets in Asia. While farm gate price volatility and unpredictable seasonal weather patterns are creating serious challenges for dairy farmers, the overall picture in Australia's dairy community is not doom and gloom, but rather a sense of hope and opportunity.

Source: Adapted from *The Guardian*, 31 December 2013

Extract 4: Tackling greenhouse pollution

All fresh produce; dairy, meat, fruit and vegetables naturally require cooling. But the refrigerant gases are often not natural. These synthetic gases are heavy greenhouse polluters and they also attract a penalty price. The alternatives are natural gases that don't attract a penalty, because they are not greenhouse polluting.

The association which represents the alternative sector says Australian companies should transfer their cooling systems to natural refrigerant gases. President of the Australian Refrigeration Association, Tim Edwards, says other countries like China, the US and Europe have moved towards cleaner technology within 15 years. "The industry is responsible for more than 11 per cent of national greenhouse gas emissions. The government should support the industry's move in switching to natural refrigerants and discourage firms from using refrigerants containing synthetic gases."

Source: Adapted from *Australian Broadcasting Corporation,* 2 July 2013

Extract 5: Competition in Australia's dairy industry

There is little the average farmer can do about rainfall, but the removal of protectionist measures of Australia's milk markets over the past 30 years has exposed these small businesses to competitive market pressures. Recently, the Abbott government has secured a historic free trade agreement with South Korea, Australia's fourth largest trading partner. Under the deal, tariffs will be eliminated on Australian agricultural exports, including beef, wheat, sugar, dairy, wine, horticulture and seafood, as well as resources, energy and manufactured goods. Trade Minister Andrew Robb cited modelling by the Centre for International Economics that showed the free trade agreement would be worth more than $5 billion in extra income to Australia between 2015 and 2030.

Such measures have forced farmers to invest more in economies of scale and technology designed to enhance on-farm productivity. Despite such investment, the total number of dairy farms has fallen from a peak of 20,300 in 1982 to its current level. There is also a correlation between the farm gate price of milk and the attrition rate of family-owned farms. Periods of low farm gate milk prices often increases the flow of farmers leaving the industry.

A modest growth in milk production over the next five years is forecast due to improved herd management and greater economies of scale. However, the total number of farms is expected to fall. Farm management and the application of greater science and technology to herd health, pasture production, feeding and milking systems will be critical to success.

Source: Adapted from *The Conversation* and *The Sydney Morning Herald,* 2013

Table 1: Australian farmgate milk prices

Month	$/kg
Jan - 11	4.60
Apr - 11	5.00
Jul - 11	5.70
Oct - 11	4.70
Jan - 12	4.90
Apr - 12	5.00
Jul - 12	5.10
Oct - 12	4.70
Jan - 13	4.50
Apr - 13	4.60
Jul - 13	5.30
Oct - 13	5.60
Jan - 14	5.90

Source: Agriculture and Horticulture Development Board Dairy

Questions

(a) (i) With reference to Table 1, describe the trend in farmgate milk prices in Australia from July 2011 to January 2014. [2]

(ii) Explain one possible reason for the changes in UK milk prices observed above. [2]

(b) Explain why farmers "are complaining that they are being paid less" in Extract 1. [4]

(c) Explain how a weaker New Zealand dollar increases demand for dairy products from New Zealand. [2]

(d) (i) With reference to Extract 4, explain why market failure occurs in the market for fresh agricultural products. [6]

(ii) Discuss the extent to which switching to natural refrigerants will help to reduce greenhouse gas emissions. [6]

(e) Discuss the effects of the removal of protectionist measures in the Australian dairy market. [8]

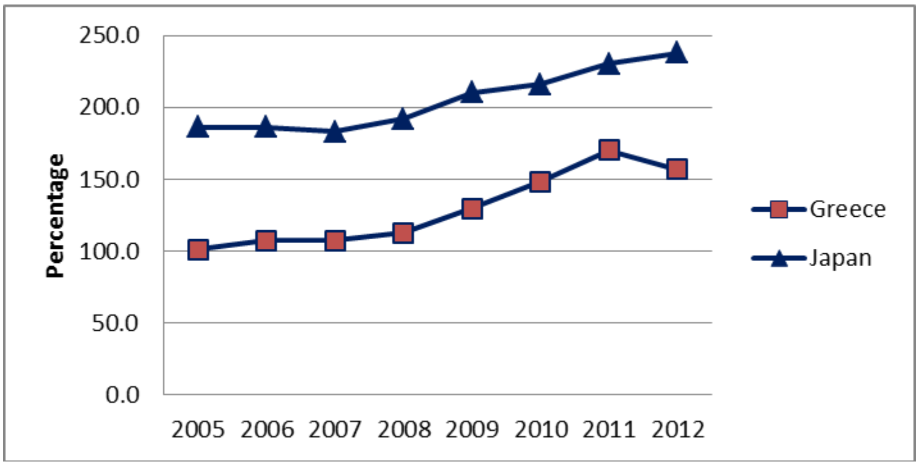
[Total: 30]

[Turn over

Question 2

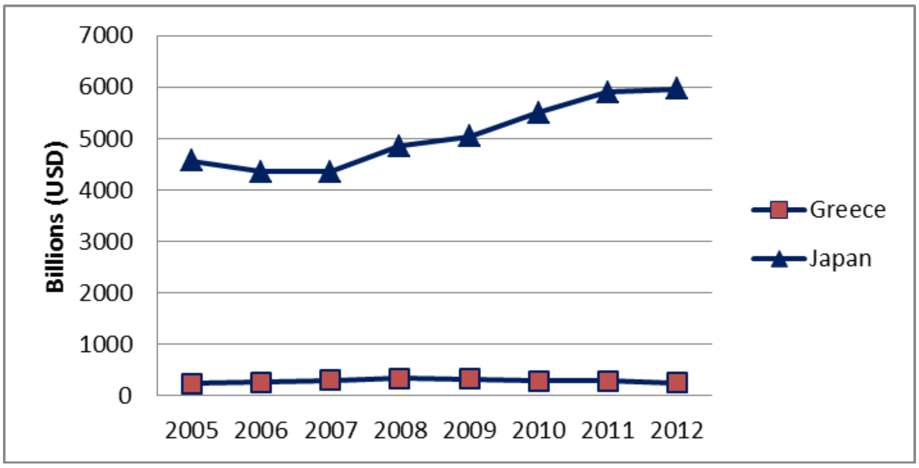
Government Debt Crisis in Greece and Japan

Figure 1: Debt-to-GDP Ratio for selected Economies



Source: *IMF World Economic Outlook Database*

Figure 2: GDP in current prices (USD) for selected Economies



Source: *IMF World Economic Outlook Database*

Extract 6: Japan to learn whether Abenomics will live up to pro-growth rhetoric

There are three strands to Abenomics – a more activist monetary policy from the Bank of Japan (BoJ), a fiscal boost from increased spending on public works and structural reforms to make the economy more productive.

In reality, the BoJ will be expected to do most of the heavy lifting. The new government has announced an expansionary budget but fiscal policy is constrained by the dire state of Japan's public finances. A debt-to-GDP ratio in excess of 200% is the result of more than two decades of sluggish growth and repeated attempts to pump-prime the economy. Meanwhile, structural reforms will take time to work, leaving Japan's central bank with responsibility for boosting short-term growth.

Despite the need for larger quantities of imported oil after the Fukushima nuclear disaster two years ago, consumer prices have been falling almost continually since the Great recession of 2008-09. The central bank's challenge is to bring up the rate of inflation to 2%, so that companies and individuals can take advantage of negative real interest rates – borrowing costs lower than the annual increase in the cost of living – and to drive down the value of the yen.

Source: *The Guardian*, 2 April 2013

Extract 7: Weak Japanese GDP data highlights flaws in Shinzo Abe's three 'arrows'

Problems have emerged with every bit of the three-quiver policy. Firstly, driving down the value of the yen was supposed to boost the Japanese economy by making life easier for its key export sector. But it has also raised the cost of imports, particularly fuel, at a time when domestic energy production remains hampered by the Fukushima nuclear plant. Dearer energy raises business costs and eats into consumers' real incomes. As some analysts noted, Japan is getting higher inflation as planned, but it is the wrong sort of inflation.

A second problem is that doubts are starting to surface about the government's commitment to structural reforms. Japan is an elderly and conservative country where the dynamics of an ageing population make it mightily difficult to raise participation rates in the labour market or reduce subsidies to farmers, even if ministers were prepared to make themselves unpopular.

But the biggest immediate problem for Japanese prime minister Shinzo Abe is that the weak growth has raised doubts about whether he will go ahead with the increase in consumption tax next year, designed to show markets that Tokyo is serious about tackling Japan's public debt, currently 240% of GDP. The increase in sales tax from 5% to 8% is chunky and, with a second increase to 10% planned for 2015, clearly has the capacity to derail economic recovery.

Source: *The Guardian*, 12 August 2013

Extract 8: What is the Greek debt crisis all about?

The first sign of trouble in Greece was when George Papandreou took over as prime minister in October 2009 and found that the government had been understating its public debts for years.

Despite being poor, the Greek government has for decades sought to be generous to its people: the Greek state has tried to soothe its people by creating a big welfare state and generous pay and pensions - including low retirement age and the famous 13th and 14th monthly salaries.

When it came to joining the euro in 2001, it should have been obvious that Greece did not meet the debt conditions. But, by spinning the numbers, Greece gained entry, not just to the single market but to debt markets that allowed it to borrow as though it was as dependable as Germany.

Greece went on a spending spree on infrastructure, services and public sector wages. Meanwhile, the Greeks stopped paying taxes. To Greece's delight, banks and the financial markets filled the gap by lending billions of euros. With the onslaught of the credit crunch, Greece's vast debts were exposed - but so was the exposure of European banks. If Greece went bust, untold damage could be unleashed across Europe and beyond: for a global economy still shattered from the 2008 banking crisis, the prospect of another one was intolerable.

Politicians have been driven by a determination to make Greece pay for its overspending. Mr Papandreou unveiled the first austerity package in January 2010. Meanwhile, Eurozone leaders resolved that despite being called "bailouts" the help would be in the form of loans.

Their other key strategy has been to persuade others to buy the debt - from banks, central banks and governments.

Or, as critics point out, they decided to solve the debt crisis with more debt - and a highly contagious situation with an even more complex web of exposure. In May 2010, leaders unveiled a €110bn (£93bn) bailout with money from the European Union (EU), the European Central Bank (ECB) and the International Monetary Fund (IMF). But the so-called troika set tough conditions in return: the money would be released in 10 tranches and only once Greece had met tough austerity targets of spending cuts, tax rises and structural reforms.

Source: *The Telegraph*, 23 February 2012

Extract 9: Greek Crisis: Is there a solution?

The impact of Greece's financial woes is being felt ever more keenly in European financial markets as fears grow that some kind of debt default may be inevitable. Experts say a default could have a dire impact on other weak economies in the 17-nation Eurozone and fuel doubts about the single currency's viability.

The Greek government is racing against time to fulfil the demands of international lenders and qualify for a new lifeline to avoid default. But even if the Greek parliament adopts the new austerity measures - tax rises, spending cuts and privatisation - necessary to secure a new loan package, it will only bring temporary relief. In the meantime, Greece would need to restructure its economy, boost much-needed tax revenue and eventually return to commercial lenders.

In the event of an outright default by Greece, the consequences would be felt mainly by the big EU economies that have lent to Greece. German and French financial institutions are thought to hold up to 70% of Greek debt and would be severely hit. International investment in the Eurozone would also be hurt significantly.

Source: *BBC News*, 21 June 2011

Questions

(a) (i) Compare the debt-to-GDP ratios from 2005 to 2012 of Japan and Greece in Figure 1. [2]

(ii) Explain whether the above data explain the changes in economic growth of Japan and Greece as shown in Figure 2. [4]

(b) Explain two possible reasons for the increase in government debt in economies like Japan and Greece. [4]

(c) With reference to Extract 6, explain why bringing up the rate of inflation will cause ‘negative real interest rates’ and ‘drive down the value of the yen’. [4]

(d) Examine the consequences on Greece and other economies in the Eurozone when the Greek government “sought to be generous to its people”. [8]

(e) Discuss whether Greece should adopt the same approach as Japan in solving its own economic problems. [8]

[Total: 30]

[Turn over

Section B

Answer **one** question from this section

3 **(a)** Explain why government intervention is advocated in the markets both for public goods and for goods where positive externalities are present. [10]

(b) Public transport is free in the Central Business District of Estonia. However, a fare is charged for travelling on public transport in other areas of Estonia.

Adapted from Eco-innovation Action Plan, 17 June 2013

Assess whether the economic case for these two different approaches is justifiable. [15]

4 **(a)** Explain the different types of unemployment. [10]

(b) Suppose a country such as Singapore were to experience a significant fall in demand for its exports. This results in a balance of trade deficit and a rise in unemployment.

Discuss the view that supply-side policy is the best policy option in reducing high unemployment in an economy. [15]

End of Paper