MERIDIAN JUNIOR COLLEGE
Preliminary Examination
Higher 2

Economics 9732/1

Paper 1 **13 September 2011**

2 Hours 15 Minutes

Additional Materials: Answer Booklet/Writing Paper

READ THESE INSTRUCTIONS FIRST

Do not open this booklet until you are told to do so.

Write your name, civics group and register number on all the work you hand in.
Write in dark blue or black pen.
You may use a soft pencil for any diagrams, graphs or rough working.
Do not use staples, paper clips, highlighters, glue or correction fluid.

Answer **all** questions.
At the end of the examination, fasten all your work securely together.
The number of marks is given in brackets [ ] at the end of each question or part question.

[Turn Over]

Question 1: Renewable Energy

Extract 1: Oil prices should spur investments in energy technologies

Oil supply has been hit by uncertainties in the Middle East. Although we have not seen major disruptions, prices for crude oil are fluctuating, ranging up to US$120 per barrel, and most predict the long-term trend will be upwards.

To ensure affordability, Vietnam, Indonesia and Malaysia continue to subsidise energy, increasing government burdens as oil prices rise. Their artificially low energy prices increase waste and destroy incentives to invest in alternative technologies.

Studies suggest that energy efficiency measures can achieve at least the equivalent savings in power needs with safe, off-the-shelf technology at a much lower cost. Renewable energy currently costs more but with technological advances, may prove viable in the medium term.

Source: Today Online, 27 July 2011

Extract 2: Renewable energy markets in developing and developed countries

Renewable energy enjoyed a "remarkable growth" in investment last year, says a recent UN report, rising by one-third to a record $211 billion worldwide. China alone splurged $48 billion on new green energy projects to consolidate its position as the world's leader. And, for the first time, developing countries collectively spent more on renewables than their richer counterparts.

But curiously, this building frenzy coincides with a wave of cuts to solar subsidy schemes across Europe. The future of sun-power does not look so bright in Spain, for instance, where cuts to the subsidy that the state uses to guarantee producers a set price for energy sold to the grid – have been made to tackle the enormous debts run up by the scheme. The government now faces lawsuits from its own renewables sector, which had invested heavily on the promise of such profits. More recently, France has drawn criticism from the EU over its reduction of solar subsidies, which have damaged investor confidence.

Although China's ability to afford its $46 billion stimulus package is not likely to be tested, many other developing countries experiencing booms would do well to take note.

Source: The Economist, 26 July 2011

Extract 3: Renewable energy still too expensive

Despite high oil prices, fossil fuels will continue to trump renewable energy sources such as solar and wind power without massive government subsidies, a new investment bank says. On a barrel of oil equivalent basis, an equal amount of solar power would cost about $450 a barrel even after factoring carbon dioxide costs of about $50 per tonne — which Mawdsley noted is more than double the current price of emission credits in Europe.

Source: Centre for Global Energy Studies, April 2011

Extract 4: Indonesia's energy challenge

Indonesia is Southeast Asia's largest energy producer and consumer. Its reliance on subsidised fossil fuels means it has made little progress in terms of renewable energy. Yet Indonesia has enormous renewable energy potential. Energy sources such as geothermal power could readily meet up to 40 per cent of the country's energy needs while emitting none of the greenhouse gases like carbon dioxide that are produced by burning fossil fuels. But switching to renewable energy won't be easy. Removing fuel subsidies is a sensitive political issue. Promoting renewable energy requires structural adjustment and high levels of initial investment.

Source: Inside Indonesia, 25 July 2011

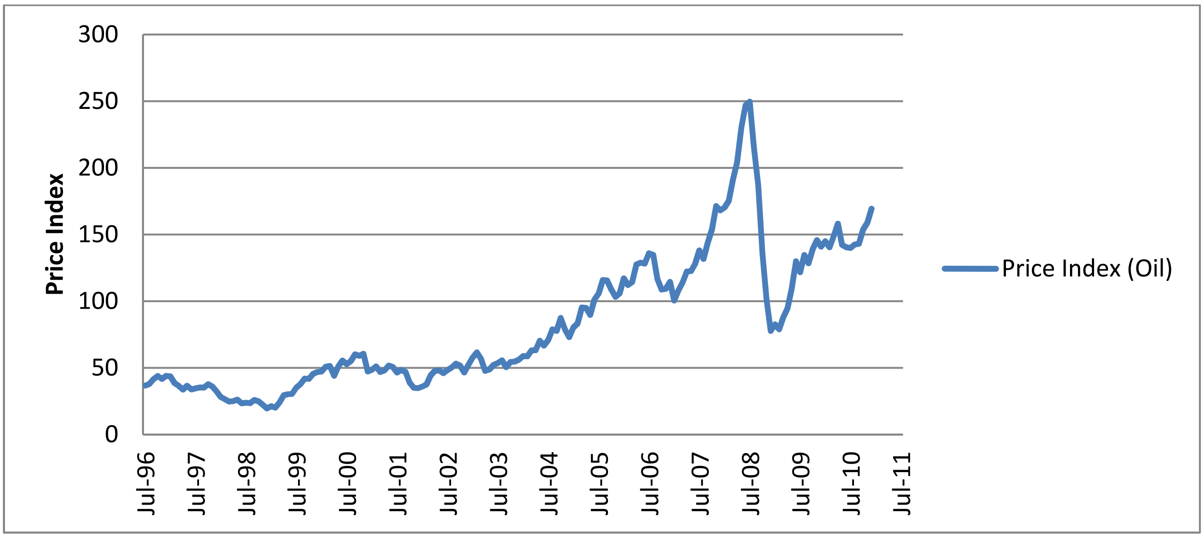
Extract 5: Japan shifts towards renewable energy

In Japan, regulated utilities, like TEPCO, control both the production and distribution of electricity. Hence operators of wind- or solar-farms must sell their electricity to these renewable-energy middlemen. While utilities are required to purchase a small percentage of their electricity from renewable sources (last year about 1.3 percent) they have no incentive or obligation to replace any more of their conventional power with alternatives. Furthermore, the grid itself is built to handle centralized thermal and nuclear plants rather than distributed renewables.

A proposed new law would require utilities to buy all electricity generated by renewable sources. It would also introduce a feed-in tariff (FIT), requiring utilities to pay a higher price for electricity from solar, wind, geothermal, biomass, and small- and mid-scale hydro-electric plants. FITs are common throughout the world; a similar system recently helped Germany leap to the forefront of the solar market. Japan's FIT legislation faces opposition from politicians and industries concerned that the price of electricity will rise.

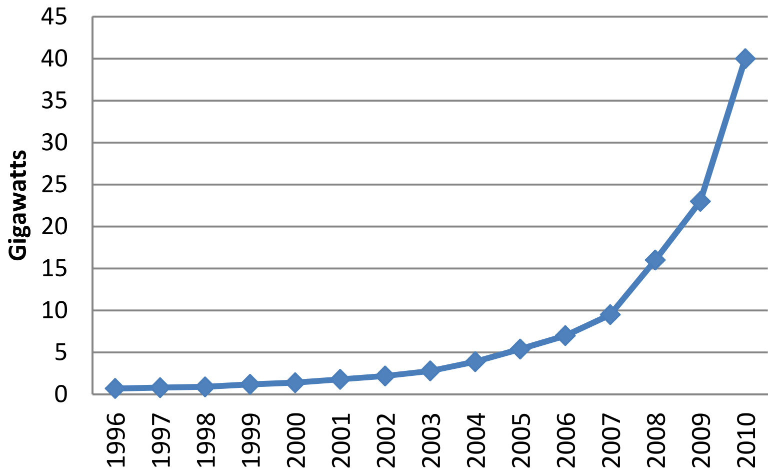
Source: The Japan Times, 24 July 2011

Figure 1: Oil Prices from 1996-2010



Source: World Bank Commodity Data

Figure 2: Existing world solar energy capacity, 1996-2010



Source: PV news, EPIA

Questions:

a Compare the changes in the world price of oil between 1996 to 2010 with the changes in solar energy capacity over the same period. [2]

b Explain why 'artificially low energy prices increase waste and destroy incentives to invest in alternative technologies.' (Extract 1) [6]

c With the help of a diagram, explain the impact of the proposed new law on a firm like TEPCO. [4]

d To what extent will the changes in oil prices impact the renewable energy market of different economies? [8]

e In light of the data provided, if you were a consultant economist, would you recommend that Singapore leave the production of renewable energy to the market? Justify your answer. [10]

Total Marks: 30

Question 2: The Road to Recovery

Extract 4: Post-crisis Recovery

Six months ago the Asian economies were among the hardest hit in the world, as exports to the rich world plunged. How can they be bouncing back when demand in America and Europe remains feeble? Domestic demand seems to be the key, thanks to the biggest fiscal stimulus of any region of the world. On the other hand, Singapore's bounce, for example, was partly due to a big increase in pharmaceuticals production, which is notoriously volatile.

Sceptics argue that China alone cannot ignite economic recovery across the region because a large portion of Asia's exports to China are just intermediate goods, which are processed into exports to developed economies. The Asian Development Bank calculates that 60% of the region's exports eventually end up in the rich world. However, this ignores the huge boost that China's rebound is giving to business and consumer confidence across the region.

Source: The Economist, 30 July 2009

Extract 5: China building its domestic engine

China is fulfilling the long-standing demand of Western governments that it shifts its engine of growth from exports to domestic demand, which according to some economists, is better for boosting emerging economies' economic growth. China's real domestic demand is likely to grow by at least 10% this year.

The problem in China is more that the mix of domestic demand between consumption and investment is unbalanced, and becoming even more so. This year the bulk of the government's stimulus is going into infrastructure, further swelling investment's share. Chinese capital spending could exceed that in America for the first time, while its consumer spending will be only one-sixth as large. This is China's most glaring economic imbalance. Spending lots of money on building railways, roads and power grids is the most effective way for the government to prop up demand in the short term—especially since China, as a poor country, needs better infrastructure. However, the pace of investment is unsustainable.

Chinese households have been saving a bigger slice of their income because of an inadequate social safety net. However an inadequate welfare state does not fully explain why consumption has fallen as a share of GDP. The more important reason why consumption has fallen is that the share of national income going to households (as wages and investment income) has fallen, while the share of profits has risen. Growth has been capital-intensive, focusing on heavy industries such as steel rather than more labour-intensive services.

Last but not least, China needs to allow its exchange rate to rise. This would lift consumers' real purchasing power, discourage excessive investment in manufacturing and help to reduce the trade deficit further. It would also alleviate the risk of a protectionist backlash abroad.

China's recent efforts to boost domestic spending have helped to maintain robust growth and reduce its trade surplus. But excessive levels of investment are not a recipe for sustained rapid growth.

Source: The Economist, 30 August 2009

Extract 6: Preference for export-led growth

However, some economists do not accept that there should be an emphasis on domestic demand. They argue that trading links are the strongest evidence of the emerging economies' ability to grow. They state 'no emerging market that adopted an export-led growth model has subsequently needed to break away from it – including China'. China's exports as a percentage of GDP are 32% compared with only 13% for the US. Smaller Asian countries are even more dependent on exports; Singapore's ratio of exports to GDP is 234%. Hong Kong's is 169%. It will be difficult for economies such as these to increase domestic demand and reduce their dependence on export-led growth.

Source: The Financial Times, 12 June 2009

Extract 7: China's rapid growth is due not just to heavy investment, but also to the world's fastest productivity gains

Productivity growth is perhaps the single most important gauge of an economy's health. Nothing matters more for long-term living standards than improvements in the efficiency with which an economy combines capital and labour.

The most important determinants of longer-term productivity growth are the rate of adoption of existing and new technologies, the pace of domestic scientific innovation and changes in the organisation of production. These, in turn, depend on factors such as the openness of an economy to foreign direct investment and trade, education and the flexibility of labour markets.

China's productivity growth is likely to slow unless the government pushes ahead with bolder reforms such as opening up the service sector to private firms and making it easier for workers to shift from rural to urban areas. This would result in a better allocation of labour and capital which would help sustain rapid growth but make it more job-intensive.

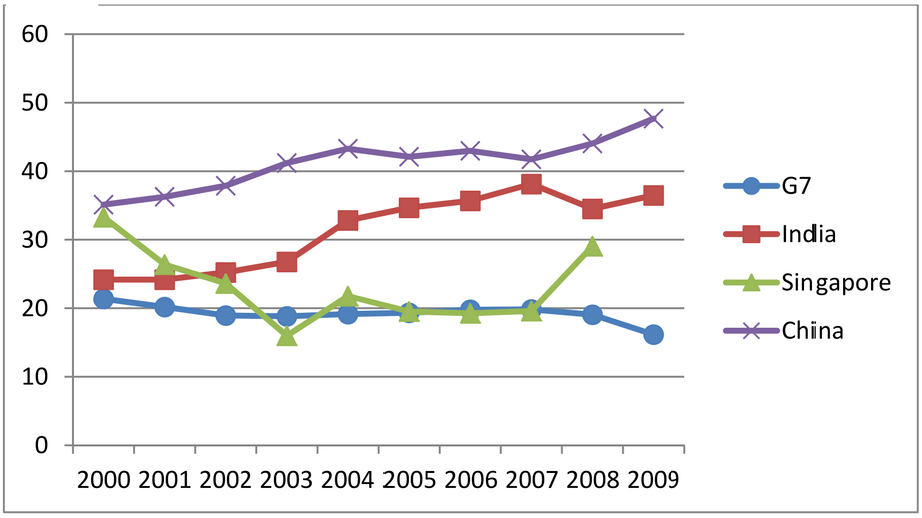
Source: The Economist, 12 November 2009

Table 1: Forecast growth rate in GDP for selected countries

		2010 (%)
G7 Countries	US	+1.4
	UK	+0.3
	Germany	+0.3
	Japan	+0.4
Asia countries	China	+7.0
	Singapore	+1.9
	India	+6.4

Source: The Economist, April 2009

Figure 3: Investment (%GDP) for selected countries



Source: World Bank

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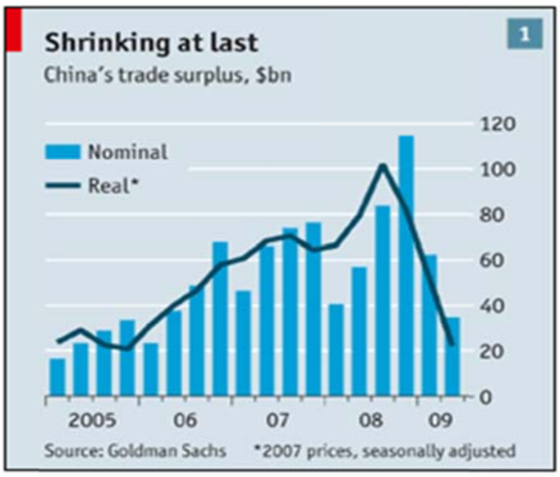

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Source: The Economist

Questions

a **(i)** Summarize the growth rates in GDP for selected countries in Table 1. [2]

(ii) With reference to data, explain one possible reason why growth rates differ from country to country [2]

(iii) Is there enough evidence to support the view that there has been an improvement in the economic situation of Asian countries [2]

b To what extent does the data suggest that the Chinese government should allow the currency to appreciate in 2010? [6]

c Identify the two policy approaches suggested by economists for China and discuss whether there is a conflict between them. [8]

d In light of the issues raised in the data, discuss the desirability of globalisation. [10]

Total Marks: 30

End of Paper

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COVER SHEET

ECONOMICS HIGHER 2 **9732/01**

PAPER 1: Case Study Question

Question 1

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Register Number: _____________ Economics Tutor: ___________

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At the end of the examination, fasten this cover sheet to your answer scripts for Question 1 with the string provided before submission.

QUESTIONS ATTEMPTED	MARKS
(a)	
(b)	
(c)	
(d)	
(e)	
TOTAL	/30

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COVER SHEET

ECONOMICS HIGHER 2 **9732/01**

PAPER 1 Case Study Question

Question 2

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Register Number: _____________ Economics Tutor: ___________

13 September 2011

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QUESTIONS ATTEMPTED	MARKS
(a)(i)	
(a)(i)	
(a)(iii)	
(b)	
(c)	
(d)	
TOTAL	/30