HWA CHONG INSTITUTION
C2 Preliminary Examinations
Higher 2

CANDIDATE NAME		**CT GROUP**	**15**
CENTRE NUMBER		**INDEX NUMBER**	

ECONOMICS
Paper 1 Case Study Questions

9732/01
29 August 2016
2 hours 15 minutes

Additional Materials: Answer Paper

READ THESE INSTRUCTIONS FIRST

Write your **name**, **CT group, Centre and Index numbers** clearly in the spaces at the top of this page and on every page 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, graphs or rough working.
Do not use staples, paper clips, highlighters, glue or correction fluid and tape.

Answer **all** questions.

Begin Question 2 on a fresh sheet of writing paper.

At the end of the examination, fasten your answers to Question 1 and Question 2 **separately** with the two cover pages provided.

The number of marks is given in brackets [ ] at the end of each question or part question.
You are advised to spend several minutes reading through the questions before you begin writing your answers.
You are reminded of the need for good English and clear presentation in your answers.

Answer **all** questions

Question 1

The Coal Industry and Housing Market in the United Kingdom (UK)

Extract 1: Decline of the UK coal industry

In 1970, 292 UK mines employed 287,000 miners and produced 145 million tonnes of coal a year. Today, the UK has just 4,000 miners and 13 million tonnes of annual output. Domestic production accounts for less than 25% of the 60 million tonnes used in the UK, with the rest mostly imported from the United States (US), Russia, Australia and Columbia. Yet soon, there will be only one deep mine and fewer than 20 surface mines left in the UK after the UK's largest coal producer, UK Coal, announced plans to close two of the three remaining deep pits because they are no longer financially viable. The closures will affect a total of 1300 workers.

The UK coal industry didn't just collapse overnight. The decline started since the First World War. The UK mines came under increasing competition from alternative power sources and cheap coal produced elsewhere in the world. Coal-fuelled power stations provided 80 per cent of UK's energy in 1961. Things changed during the 1990s. Government invested in nuclear energy and by the middle of the decade, gas had overtaken coal. In 1990, gas powered less than 1 per cent of UK's electricity. By 2011, it powered 40 per cent, with coal down to 32 per cent.

If 21st Century market forces are less favourable to the UK coal industry, so too is the green agenda. Coal produces electricity more cheaply than gas, but it is the dirtiest fossil fuel and emits more carbon emissions. In 2013, the government introduced a carbon price support tax. The European Union (EU) directives require coal-fired power stations to reduce their carbon emissions by 2023 or face closures.

Concern has mounted that the UK efforts to promote low-carbon energy are hampering competitiveness and leading to higher energy bills.

"Getting coal off the grid as soon as possible makes energy more expensive, and you lose the diversity of the generation mix … Security of supply and affordability have been placed behind carbon emissions targets," says Phil Garner, director-general of The Confederation of UK Coal Producer (Coalpro).

Sources: Energy & Technology Magazine, 14 April 2014 and The Financial Times, 12 March 2014

Extract 2: UK's Battered Coal Industry Sees Glimmer of Hope in Carbon Capture

The UK sits atop significant coal resources. In September 2013, the British Geological Survey estimated that over 17 billion tonnes of coal remain in the UK's coalfields, enough to provide power for 300 years. This could potentially create thousands of jobs and reduce the UK's balance of trade deficit.

Supporters of the coal industry are counting on the UK government's drive to support a new and untested Carbon Capture and Storage (CCS) technology, which could enable coal-fired power stations to trap and pipe harmful emissions underground out to under the seabed during the production of electricity.

"That means there is a future for the UK coal industry; it won't be particularly massive but it will be the retention of perhaps 10 million tonnes a year of output," said Tony Lodge, research fellow at the London-based Centre for Policy Studies.

If CCS does take off, UK's deep mines will need to find a way to cut production costs. They are in fierce competition with cheaper suppliers from Colombia, Russia, China, and the US.

The coal industry is urging the government to require domestically-produced coal to be used in future CCS plants.

Source: Reuters, 17 October 2014

Extract 3: UK House Building Soars Amid Housing Market Revival

House building in the UK is rapidly on the rise amid the economic recovery. But the pace of house building continues to fall well short of what is needed to keep up with demand.

Construction firms are now chasing profits from higher house prices. But building in the short term is held up by a lack of materials and labour. The surge in demand in late 2013 and early 2014 led to materials such as bricks running out. Construction workers left the industry during the financial crisis and the industry has struggled to recruit enough skilled labour to catch up with increasing demand.

In November 2014, the government set out a range of steps to try to recruit new construction workers. One of the proposals suggested bringing former military personnel on to building sites. The House Builders Federation also pointed out that suppliers have responded to short term pressures through increased training schemes and gave examples of brick makers reopening plants.

The housing crisis in the UK is not just one of a shortage of houses. The housing stock is among the oldest and coldest in Europe due to poor insulation and the cost of heating leaking properties is leading to a rise in fuel consumption.

Sources: International Business Times, 15 May 2014 and BBC News Magazine, 13 January 2015

Table 1: The UK: selected data, 2013

Region in the UK	Average house price[1]	Average annual income of borrowers[1]	Population (in millions)	Area km^2	Electricity Tariff[2]	
					Day (pence per kWh)	Night (pence per kWh)
North West	186,000	50,000	7.1	14,165	16.91	8.46
Yorkshire	181,000	49,000	5.4	15,420	16.28	8.36
East	277,000	63,000	6.0	19,120	15.83	8.59
London (Capital)	362,000	79,000	8.5	1,572	16.19	8.64
South East	318,000	69,000	8.8	19,095	16.63	8.43

[1] *figures rounded to the nearest £1,000s;*
[2] *electricity charges by the electricity company, Good Energy*

Source: various

Extract 4: The UK's Climate Change Act

The Climate Change Act contained the world's first legally binding national commitment to cut greenhouse gas emissions. The headline target is to cut emissions by at least 80% from 1990 levels by the year 2050.

Power and Industry
The power sector comprises the large-scale production of electricity while industry activity includes manufacturing, construction, and extraction of fossil fuels (e.g. coals, oil, etc) and refining. Emissions from power and industry accounted for 26% and 23% respectively of total UK greenhouse gas emissions in 2013.

The UK applies carbon pricing under both EU and national schemes. The EU Emissions Trading Scheme (EU ETS) forces all big factories and power plants to buy a permit for each tonne of CO_2 emissions. Recently, these permits have traded at £5-6 per tonne of CO_2. The overall cap on emissions is lowered progressively. UK has topped up that very low carbon price with its own Carbon Price Floor scheme, designed to provide long term certainty for low carbon investment. Government support has also been provided to transit to a low-carbon power sector, which uses renewables (such as wind and solar), nuclear and carbon capture and storage (CCS).

Buildings
Emissions from buildings accounted for 17% of total UK greenhouse gas emissions in 2013. Direct emissions, resulting from use of fossil fuels (primarily gas) for heating, make up almost half of buildings emissions. The other half is electricity-related, resulting from lighting and the use of appliances.

The Green Deal and Energy Company Obligation (ECO) target retrofit improvement in the energy efficiency of homes (e.g. loft and cavity walls insulation and replacement of old inefficient boilers) at no upfront cost for consumers. The costs of the measures is paid back over time through electricity bills and payments are supposed to be less than savings through reduced energy bills (the ‘Golden Rule’).

Source: Committee on Climate Change, July 2014

Questions

(a)	With reference to Extract 3, explain why the value of the price elasticity of supply of new housing in UK might change over time.	[3]
(b)	With reference to Table 1, explain whether the pricing policy by the electricity company could be considered an example of price discrimination.	[4]
(c)	Using the information in Table 1, account for the difference in average house prices in London and Yorkshire.	[3]
(d)	Explain the type of unemployment that might arise due to the closure of the two coal pits.	[2]
(e)	Discuss the factors that the UK government should consider in deciding to redevelop the coal industry.	[8]
(f)	Discuss whether the UK government currently adopts the most appropriate economic policies in reducing greenhouse gas emissions to achieve economic efficiency in resource allocation.	[10]

[Total: 30]

Question 2

The Pains and Gains of Economic Restructuring

Extract 5: China – The need to restructure

The National Bureau of Statistics (NBS) announced that the world's second largest economy, China, grew 7.4 percent in 2014. Although the pace was the slowest in 24 years, it was in line with mainstream market expectations against the general backdrop of China's painstaking efforts in economic restructuring, which was prompted by both external and internal vulnerabilities.

Externally, the prolonged weakness and instability of the United States (US) and Eurozone economies have exposed China’s vulnerability to external shocks. China had to resort to a 4 trillion yuan (US$586 billion) stimulus package in 2008 to fend off the contagion effect of the global financial crisis.

Internally, the Chinese are concerned over the formation of real estate bubbles that are fuelled by excessive borrowing. The fear is that if the real estate bubbles were to burst, housing prices will come tumbling down. This would cause some households to cut down on expenditure of other goods and services in an attempt to pay their debts, sending internal shocks reverberating throughout the economy.

A source close to the central government said, "There are downward risks, but China has enough policy room and there is no need to be pessimistic."

Source: Xinhua, 20 Jan 2015

Extract 6: China – Restructuring to boost consumption

China’s level of consumption, at 36 percent of GDP, is much lower than the world average, which measures at 60 percent of GDP. This is partly because Chinese consumers hold larger precautionary savings to guard against illness and loss of income during old age. High savings may be changeable over time; improvements in health and pension coverage are expected to continue to lower the necessary savings ratio and boost consumption. Planned expansion of urbanization should also improve consumption as China’s cities expand and its middle class grows.

Consumption, however, is dependent not only on the presence of health care and urban residence, but on jobs, and this is where the anxiety prevails. Households earning US$16,000 to US$24,000 per annum accounted for only 15 percent of urban households in 2012. GDP per capita averages at only US$6,807 per annum, and the population is aging. China’s challenge now lies in creating the types of jobs that will cater to a growing mass of educated workers and provide higher incomes. As local officials have learned, simply building up urban areas does not draw in high value businesses, nor does it create middle class residents in the absence of jobs.

Moves were announced by the State Council to encourage the hiring of the longer-term unemployed and new graduates to stave off an unemployment crisis. Preference in bids for large-scale projects is to be given to firms that commit to hiring more people. This is on the right track, but while these policies may improve the employment outlook, they could still go further in ensuring that most firms have better access to finance, lower taxes, and strong supporting institutions. In addition, it is the restructuring toward a service-based, skills-intensive economy that is essential.

Source: The Diplomat, 3 May 2015

Extract 7: Singapore – Restructuring into a "manpower lean" and creative economy

Singapore has embarked on a restructuring process towards being a "manpower lean" economy by cutting growth rates of foreign labour. This is done by imposing more stringent stipulations and also increasing the levy fees imposed for hiring foreign staff manpower. Small-Medium enterprises (SMEs) have been hit especially hard by the new rules. There are ample subsidies to push SMEs towards being manpower lean through using more productive capital goods but there is uncertainty about the return on investment. Addressing these concerns, Acting Minister for Manpower Mr Tan Chuan Jin said in parliament, "Given Singapore's small physical size, we will need to grow within the constraints that we have. Restructuring for higher productivity will be a risky and painful process for companies but we cannot proceed with business as usual".

At the same time, Singapore is also trying to restructure into a creative economy and reduce the nation's dependency on manufactured goods. An emphasis on design has been key to this planned shift into a creative economy. The Singapore government recognizes that, with growing access to better technology, industries are increasingly competing via price and functionality. The new competitive advantage thus lies in the ability to carve out new markets and create new markets through the fusion of business, technology and arts. Design, which serves to bring about such a fusion has emerged as the key differentiation strategy for businesses.

Singapore-based firms seem to be adapting well and are increasingly engaged in the design phase of manufacturing rather than the physical production of goods. The phenomenon is known as the "servicization" of manufacturing. Monetary Authority of Singapore (MAS) managing director Ravi Menon has also referred to this trend, saying that in some cases production of goods is being shifted offshore but control centres remain in Singapore, such as in the semiconductor industry. Singaporean companies are increasingly turning to southern Malaysia for production, where wages are cheaper and government incentives provide tax breaks for new industry.

Source: various

Extract 8: Youth unemployment in the Eurozone

While the Eurozone (a bloc of 28 countries, including Germany and Greece) seems to have stabilized from the debt crisis, the risk that Europe may stagger back into the economic abyss is far from over. In many countries of the Eurozone, serious reforms to improve regional competitiveness had not been undertaken. This has sparked fears of a possible renewed recession in the Eurozone.

Unemployment in the Eurozone is already endemic and a renewed recession would worsen matters. Youth unemployment in particular is a worry because jobless youth often feel rejected by society, and react either by withdrawing or by lashing out violently, as we have already seen in some southern Eurozone nations. The impact on future productivity is also a significant worry. A growing academic literature on the 'scarring' effects of launching a career without a full-time stable job suggests that young people who endure early spells of unemployment are likely to have lower wages and greater odds of future unemployment than those who don't. These scarring effects last throughout the remainder of their 20-30 years of working life.

Currently, Greek's youth unemployment (for labour force aged under 25) is at 51.5%, second to Spain, which comes in at 53.7%. But the bloc is hugely divided. Germany and Austria have youth unemployment rates of just 7.6% and 8.2%, respectively.

Source: Duestche Welle, 17 Oct 2014

Table 2: China: selected economic indicators, 2011 – 2014

	2011	2012	2013	2014
GDP growth rate (at 2010 prices)	9.5	7.8	7.7	7.4
Exports (% of GDP)	26.8	25.7	24.8	23.9
Gross fixed capital formation (% of GDP)	44.6	45.3	45.8	44.3
Consumption (% of GDP)	37.4	36.6	36.2	37.4
Unemployment rate (%)	4.3	2.5	4.6	4.7

Table 3: Singapore: selected economic indicators, 2011 – 2014

	2011	2012	2013	2014
GDP growth rate (at 2010 prices)	6.2	3.7	4.7	3.3
Exports (% of GDP)	200.9	195.4	192.4	176.5
Gross fixed capital formation (% of GDP)	25.6	26.8	27.9	26.5
Consumption (% of GDP)	38.9	37.5	36.6	36.8
Unemployment rate (%)	2.9	2.8	2.8	3.0

Table 4: Eurozone: selected economic indicators, 2011 – 2014

	2011	2012	2013	2014
GDP growth rate (at 2010 prices)	1.6	-0.9	-0.3	0.9
Unemployment rate (%)	10.2	11.4	12.0	11.5
Youth unemployment rate (%)	21.3	23.6	24.4	23.7

Table 5: China's and Singapore's Top Export Partners in 2014

Rank (% Share)	China	Singapore
1	United States (18%)	China (12.4%)
2	Eurozone (15.6%)	Malaysia (11.3%)
3	ASEAN (12.2%)	Eurozone (9.8%)
4	Japan (5.96%)	USA (7.8%)
5	South Korea (4.5%)	Indonesia (7.4%)

Sources of Tables 2 to 5: various

Questions

(a)	Explain why the Chinese are 'concerned over the formation of real estate bubbles'.	[2]
(b)	From Extract 6, comment on the likely change in China's multiplier value after restructuring.	[4]
(c)	'Restructuring for higher productivity will be a risky and painful process for companies' (Extract 7). Explain the above statement.	[4]
(d)	Compare the trend of unemployment rate and youth unemployment rate in Eurozone from 2011 to 2014.	[2]
(e)	To what extent would youth unemployment in the Eurozone adversely affect its current and future economic growth?	[8]
(f)	A Eurozone recession would have a significant contagion impact on other economies. Assess the effectiveness of China's and Singapore's restructuring efforts in mitigating this impact on their economies.	[10]

[Total: 30]

[END OF PAPER]

Copyright Acknowledgements:

Question 1 Extract 1:	@ *The miner's strike of 1984 and the British Coal Industry*; Engineering and Technology Magazine, Vol 9, issue 4; 14 April 2014; http://eandt.theiet.org/magazine/2014/04/the-strike.cfm @*National miners' strike defines demise of UK coal industry*; The Financial Times; 12 March 2014; https://next.ft.com/content/d10f9f98-a90d-11e3-bf0c-00144feab7de
Question 1 Extract 2:	@ *Britain's battered coal industry sees glimmer of hope in carbon capture*; Reuters; 17 October 2014; http://uk.reuters.com/article/uk-britain-coal-closure-idUKKCN0I618B20141017
Question 1 Extract 3:	@ *UK House Building Soars Amid Housing Market Revival*; International Business Times; 15 May 2014; http://www.ibtimes.co.uk/uk-house-building-soars-amid-housing-market-revival-1448732 @ *Why can't the UK build 240,000 houses a year?*; BBC News Magazine; 13 January 2015; http://www.bbc.com/news/magazine-30776306
Question 1 Table 1:	@ House Price Index (HPI); Office for National Statistics; 17 February2015; https://www.ons.gov.uk/ @ Population of England in 1014, by region; http://www.statista.com/statistics/294681/population-england-united-kingdom-uk-regional/ @ Domestic Energy Tariffs; https://www.goodenergy.co.uk/media/W1siZiIsIjUzZWEyYzcxZjY0MGJhMDAwMjAwNThhOSJdXQ/Domestic%20Tariff%20Sheet.pdf
Question 1 Extract 4:	@ Meeting Carbon Budgets – 2014 Progress Report to Parliament; Committee on Climate Change; July 2014; https://www.theccc.org.uk/publication/meeting-carbon-budgets-2014-progress-report-to-parliament/
Question 2 Extract 5:	© China 2014 growth at 24-year low; Xinhua, 20 Jan 2015; http://news.xinhuanet.com/english/china/2015-01/20/c_133932040.htm
Question 2 Extract 6:	© China's Efforts to boost consumption, Are they Enough?; The Diplomat, 3 May 2015; http://thediplomat.com/2015/05/chinas-efforts-to-boost-consumption-are-they-enough/
Question 2 Extract 7:	© Restructuring is painful but must be beneficial; Channelnews Asia, 8 March 2014; http://www.channelnewsasia.com/news/specialreports/budget2014/news/restructuring-is-painful/1024186.html @ More Evidence Restructuring Taking Hold; The Wall Street Journal, 12 August 2014; http://blogs.wsj.com/economics/2014/08/12/more-evidence-singapore-restructuring-taking-hold/
Question 2 Extract 8:	© Eurozone Crisis Returns with a Vengence, Duestche Welle; 17 October 2014; http://www.dw.com/en/eurozone-crisis-returns-with-a-vengeance/a-18000470
Question 2 Tables 2 to 5:	© http://www.singstat.gov.sg/, http://www.statista.com/, and http://www.worldbank.org/; accessed 2 Aug 2016