



CATHOLIC JUNIOR COLLEGE
JC2 PRELIMINARY EXAMINATIONS
In preparation for
General Certificate of Education Advanced Level
Higher 1

ECONOMICS

8819/01

Paper 1

19 Aug 2016

1400 - 1700

Additional Materials : Writing Paper

3 hours

READ THESE INSTRUCTIONS FIRST

Write your name, class and question number 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, graphs or rough working.

Do not use highlighters, glue or correction fluid.

Begin each question on a new sheet of paper.

Section A

Answer **ALL** questions.

Section B

Answer **one** question.

At the end of the examination, **hand in EACH question separately.**

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

This document consists of **8** printed pages.

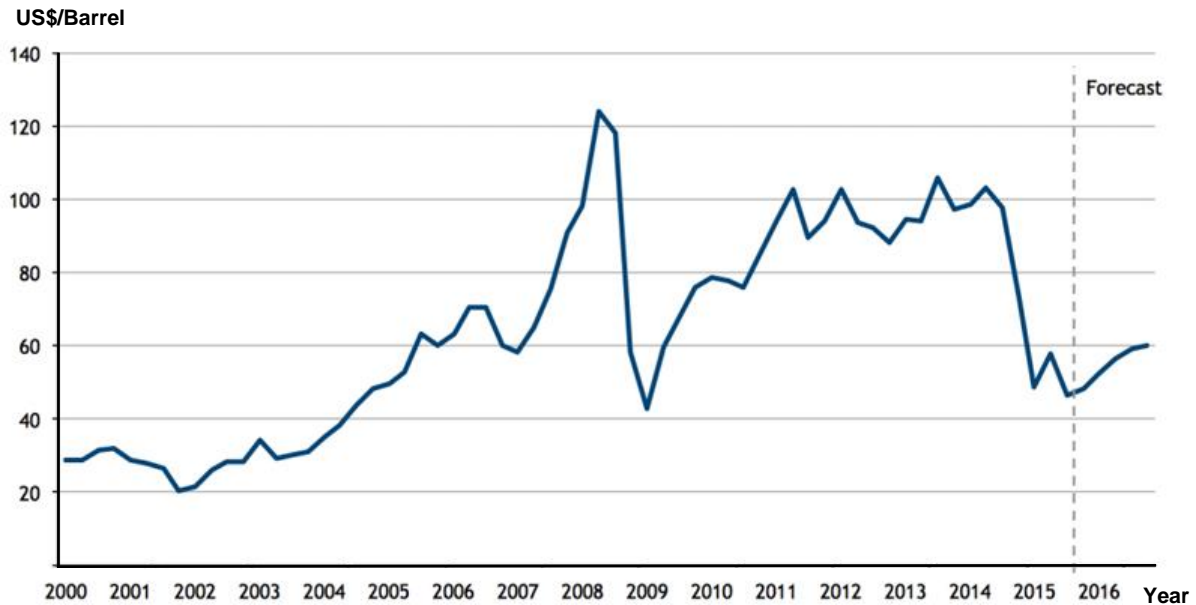
Section A

Answer **all** questions in this section.

Question 1

The oil market

Figure 1: World oil price



Source: *Bloomberg*, accessed 11 December 2015

Extract 1: Oil price plunge continues

The price of oil continued its steep fall on Friday, hitting five-and-a-half-year lows after the International Energy Agency (IEA) predicted demand next year would be lower than expected. Crude oil price has dropped 47% since June and fell to just over \$61 a barrel. The oil price has plummeted in response to a massive build-up of shale-derived oil in the US through fracking, reduced fears of fighting in Iraq disrupting supplies, and due to the faltering world economy.

The Paris-based IEA singled out Venezuela as a potential flashpoint for trouble and the warning came as Venezuela's currency, the bolívar, continued to lose close to 80% against the US dollar since the plunge in oil price. This is only part of an even bigger decline since Nicolas Maduro took office two years ago, and the oil price isn't the only thing to blame. The country's draconian capital flight controls, excessive money printing in face of a stalling economy are also factors.

But while the oil-producing countries face lost revenues and budget shortfalls, lower energy prices are expected to have a beneficial impact on the world economy. Many countries, particularly in Asia, are desperately dependent on foreign oil and gas imports, so cheaper prices should cut inflation and give impetus to manufacturing output and consumer spending. Analysts at investment bank ING said: "The recent fall in oil prices may not be sustained but, in the meantime, it provides a very welcome boost to real incomes for most major economies."

Source: Adapted from *The Guardian*, 12 December 2014

Extract 2: US\$20 Billion subsidy to fossil fuel industry

A joint investigative report by Oil Change International and the Overseas Development Institute reveals that, in the United States alone, the fossil fuel industry has benefitted from over \$20 billion per year in government subsidies between 2008 and 2015. These subsidies occur throughout the fossil fuel exploration, production and transportation along the supply chain. This also means subsidizing oil spills, in which oil companies can write off the cost of clean-up as a business expense, including the 2010 BP oil disaster in the Gulf of Mexico. Subsidies are also used extensively in the research of new drilling technologies.

“Since the initial G20 commitment in Pittsburgh six years ago, US subsidies have increased dramatically in [the Obama] Administration, in line with the increase in US oil and gas production,” said Steve Kretzmann, executive director of Oil Change International. “The President can and must do more to eliminate subsidies at home amidst the growing government budget deficit and concerns on climate change.”

Source: Adapted from *Overseas Development Institute*, 12 November 2015

Extract 3: The true cost of oil production

Every link in the chain of oil production, from exploration through consumption, generates profound damage to the local environment and communities. As the industry moves towards increasingly risky forms of fossil fuel production, the impacts become more pronounced.

A notable Harvard Medical School study identifies impacts from many aspects of oil production. Exploration for new oil and gas often brings seismic explosions and the clearing of huge swaths of forest; drilling produces toxic drilling muds and waste waters; oil transport creates additional hazards, as oil spills from pipelines, tankers and tank farms are still routine, despite industry claims of safety measures. Oil refining creates further chemical, thermal and noise pollution and affects the health and safety of refinery workers and nearby communities and ecosystems. Gasoline and many of its additives are toxic and are associated with some types of cancer, with oil industry employees and those living near refineries, transfer and storage facilities at greater risk.

A 2011 United Nations Environment Programme study estimates that in Ogoniland, Nigeria, “countering and cleaning up the pollution and catalysing a sustainable recovery could take 25 to 30 years.”

Communities in Ogoniland have fought back against this oil pollution, through protest, which at times has met brutal repression, and through lawsuits. Several lawsuits specifically on gas flaring – the burning of natural gas during oil extraction - succeeded in obtaining a court order against flaring, however, Shell and other oil producers continue the practice despite the legislation enacted.

Source: Adapted from *Oil Change International*, 10 April 2014

Extract 4: Renewable energy can't replace fossil fuels entirely

While technological advancements have made it possible for renewable energy to be used in many of the same applications as fossil fuels, there are still some limitations. For example, the energy efficiency of electric vehicles is much lower than traditional cars. Additionally, renewable energy can never and will not replace oil, coal and gas entirely. As the world's higher-quality fossil fuel reserves rapidly deplete, no combination of alternative energy sources is likely to be enough to sustain industries at their current scale. Nonetheless, large government funds have been poured into the renewable energy industry as countries seek to increase their energy self-reliance, which may bolster their economic resilience and reduce their ecological footprint.

Alternative energy sources have their own issues, such as energy transfer or destruction of the natural habitat. Hydro energy involves building dams and this, in turn, will destroy the habitat of the river or lake they are placed in. The past and the foreseeable future still belong to hydrocarbons, and we can expect natural gas, the cleanest of the hydrocarbons, to garner a bigger share of the global energy pie in the near and long term.

Source: Adapted from *The Straits Times Forum*, 17 December 2015

Questions:

- (a) Using Figure 1, compare the overall change in world oil price between 2000 and 2008 with that between 2009 and 2014. [3]
- (b) With reference to Extract 1,
 - (i) Identify and explain **two** reasons for the fall in world oil price after 2014. [4]
 - (ii) Briefly explain **two** reasons that led to the depreciation of Venezuela's bolívar. [4]
- (c) Extract 2 mentions subsidies implemented by the US government in the fossil fuel industry. Comment on the possible consequences of the imposition of such subsidies for the producers and consumers of fossil fuel, as well as the US government. [8]
- (d)
 - (i) Briefly explain the relationship between fossil fuels and renewable energy. [2]
 - (ii) Identify one possible opportunity cost of pouring large government funds into the renewable energy industry. [1]
- (e) Do you think the use of government legislation would be the best measure in tackling the circumstances as those described in Extract 3? [8]

[Total: 30]

Question 2**Trade and its impacts on Economies****Table 1: US: Selected economic indicators, 2010 – 2014**

Economic indicators	2010	2011	2012	2013	2014
Growth in real gross domestic product (% change per annum)	2.5	1.6	2.3	2.2	2.4
Inflation Rate (% change per annum)	1.6	3.2	2.1	1.5	1.6
Unemployment Rate (% change per annum)	9.7	9.0	8.2	7.4	6.2
Merchandise Exports (US\$ trillion)	1.28	1.48	1.55	1.58	1.62
Merchandise Imports (US\$ trillion)	1.97	2.27	2.34	2.33	2.41

Table 2: China: Selected economic indicators, 2010 – 2014

Economic indicators	2010	2011	2012	2013	2014
Growth in real gross domestic product (% change per annum)	10.6	9.5	7.8	7.7	7.3
Inflation Rate (% change per annum)	3.3	5.4	2.6	2.6	2.0
Unemployment Rate (% change per annum)	4.2	4.3	4.5	4.6	4.7
Merchandise Exports (US\$ trillion)	1.58	1.90	2.05	2.21	2.34
Merchandise Imports (US\$ trillion)	1.40	1.74	1.82	1.95	1.96

Sources: *World Trade Organization* and *World Bank*

Extract 5: Economists see trade imbalance as a threat to US growth

In 2001, China joined the World Trade Organisation (WTO). Although this did not change any US tariffs on Chinese imports, a tsunami of cheap Chinese imports followed – Chinese imports surged from 1% of GDP in 2000 to 2.7% by 2015. Many blamed the yuan's peg to the dollar for creating a trade imbalance. By 2014 China had accumulated nearly \$4 trillion in foreign currency to sustain the peg.

At the same time, another threat to U.S. economic growth is the slowdown in China, say economists polled by *The Wall Street Journal*. The majority sees a risk from China's economy because the slowdown is already under way. China reported weakness in production and retail sales. Plus, as the world's second biggest economy, China has a large impact on trade flows, emerging-market currencies and the overall global financial system.

Sources: Adapted from *Wall Street Journal* and *The Economist*, 2014

Extract 6: Trade, at what price?

Cheap imports were a windfall for American consumers and more trade brought more choice too. The gains from cheap stuff flowed disproportionately to the less well-off, because the poor spend more of their incomes on goods than the rich.

Exports to China grew by almost 200% between 2005 and 2014, with agriculture and the aerospace and car industries leading the charge. Some workers have benefited from rising exports, because firms that export pay more – it is estimated that exporting firms pay 18% more than non-exporting firms. Economic theory predicts that trade, though often good for average incomes, will squeeze the pay of those workers whose skills are relatively abundant overseas. A sharp rise in the additional wages earned by skilled workers from around 30% in 1979 to almost 50% by 2000 seemed to corroborate that theory, as it coincided with the first wave of cheap imports. Economist Paul Krugman warned that the sheer volume of trade with China and other poor countries was probably increasing inequality. In 2013, his model showed that trade with poor countries depressed unskilled workers' wages by 10% in 2011, up from 2.7% in 1979.

For other economists, the impact of trade on jobs was a growing concern. The sharp decline in American manufacturing employment began in 2000, just as Chinese imports took off. Economists estimate about 1 million of 5.5 million manufacturing jobs lost between 1999 and 2011 to Chinese competition. However, similar-sized job losses in other non-export industries imply many other factors at play. Technological change is probably the prime culprit for shrinking manufacturing employment. Productivity increases in the industry have been staggering. For instance, since 1994 car-making's contribution to GDP has fallen by about 10%, but there are 30% fewer car-making jobs. This had led to the false impression that America's car industry has outsourced most of its work. But advances in manufacturing technology are such that if China disappeared tomorrow, far fewer jobs would return to America's shores than left them.

Source: *The Economist*, 2 April 2016

Extract 7: Rising tide of protectionism imperils global trade

It is clear there has been greater protectionism since 2012. Simon Evenett, professor of economics at the University of St Gallen and head of Global Trade Alert (GTA), says the world is witnessing "a resurgence of interest in industrial policy, the use of local content requirements and lots and lots of government subsidies for exporting." He adds: "It's a reaction to weak economic growth". Examples of export subsidies include Brazil's 3 per cent tax rebate for exports, and rebates on imported inputs that are used in exported finished goods in China and India.

Export incentives allow countries to steal market share from their competitors, in a classic beggar-thy-neighbour approach. However, Professor Evenett speculates that may not be the case. This is because some subsidized exporters may refrain from seeking to win business since they face uncertainty over whether they are competing against a subsidised rival backed by the firepower of its finance ministry. Export incentives should increase exports, but if they become so pervasive, murky and non-transparent, that creates uncertainty and uncertainty is a killer of exports.

Source: *Financial Times*, 18 February 2016

Extract 8: Relocation of jobs as Singapore economy restructures hit PMETs hardest

Older workers and those with higher educational qualifications took longer to find jobs after they were retrenched last year, compared to other groups. And the relocation of companies overseas, mainly from the services sector, is at its highest since 2004, resulting in more workers being laid off. Among the 9,090 residents made redundant last year, more than seven in ten were Professionals, Managers, Executives, and Technician (PMETs) and about 40 per cent of those laid off from PMET jobs are in their 40s.

Concern over the employability of older PMETs has prompted the Government to roll out schemes to help this group, including enhancements to Career Support Programme, which provides a wage subsidy to employers who hire older PMETs.

Among the reasons for axing workers, business restructuring remained the top-cited factor – where companies relocate some of their operations to low-cost countries. However, more companies pointed to the economic slowdown as their reason for trimming manpower. The Ministry of Manpower noted that the decline in oil prices affected jobs in the marine and offshore-related industries. Likewise, slowing demand for marine and construction affected industries such as fabricated metal products and engineering services.

Human Resource experts believed that layoffs will continue to rise considering the bleak economic outlook, even with the Monetary Authority of Singapore moderating the Singapore currency appreciation to support economic growth. The rising cost of production here will only spur more firms to relocate their operations, and those in the manufacturing sector will need to train in new skills and move to another industry. As the economy goes into upmarket manufacturing, that requires a lot of innovation to maintain cost, there will be no replacement on headcount as technology takes over.

Source: *Today*, 21 April 2016

Questions:

- (a) (i) Using Tables 1 and 2, compare China's balance of merchandise trade with that of US between 2010 and 2014. [2]
- (ii) Explain whether the balance of visible trade of these two countries support their growth rates shown in Tables 1 and 2. [4]
- (b) Explain how an undervalued Chinese yuan may worsen US balance of trade deficit. [2]
- (c) Explain how a slowdown in China may lead to a decrease in material SOL of US citizens. [2]
- (d) Using evidence from Extract 6, discuss the impact of trade liberalization on US households. [6]
- (e) Assess the impact of using export subsidies as a protectionist measure on the national income of a country. [6]
- (f) Discuss the extent to which current supply-side policies are adequate to reduce unemployment amongst PMETs as highlighted in Extract 8. [8]

[Total: 30]

Section B

Answer **one** question from this section.

- 3 (a) Using the production possibility curve (PPC) diagram, explain the central economic problem that all societies have to address. [10]
- (b) Discuss the most appropriate economic policies for a country to shift its PPC outwards. [15]
- 4 (a) Explain how a recession in USA might cause a balance of payment deficit in Singapore. [10]
- (b) Discuss the view that depreciating the exchange rate is a more appropriate approach in correcting a BOP deficit in Singapore than an expenditure reducing one. [15]