Jurong Junior College
2016 JC2 Preliminary Examination

ECONOMICS

Higher 1 **8819/01**

Paper 1

25 August 2016

3 hours

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, graphs or rough working.
Do not use staples, paper clips, highlighters, glue or correction fluid.

Section A
Answer **all** questions.

Section B
Answer **one** question.

Start with Section B essay question first. Spend 45 minutes on the essay question.
Begin essay answer for Section B and each case study answer for Section A on a fresh sheet of writing paper.
Attempt case study questions in ascending order of question sequence and indicate questions attempted clearly on answer sheet.

Fill in the necessary information on the cover sheet.

At the end of the examination, fasten all your work securely with the **cover sheet at the top.**
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

Changing Retail Climate in Singapore, Research and Development in US

Table 1: % Change in Retail Sales

Sectors	Year-on-Year
Department Stores	1.3
Medical Goods & Toiletries	9.6
Motor Vehicles	35.9
Wearing Apparel & Footwear	-0.5
Furniture & Household Equipment	-0.8
Supermarkets	-1.0
Watches & Jewellery	-2.2
Mini-marts & Convenience Stores	-5.1
Optical Goods & Books	-6.8
Recreational Goods	-6.9
Telecommunications	-8.2
Food & Beverages	-11.4
Petrol Services Stations	-15.8

Source: Department of Statistics Singapore, 2015

Extract 1: Singapore Changing Retail Climate

Average monthly rent across Singapore declined by 1.2% while rent in the suburban areas fell by 1% in the first quarter of 2016 compared to the previous quarter.

Retail rents in Orchard/Scotts Road continued to encounter headwinds. According to the latest URA statistics, occupancy rate in that area fell by 2.1% to 92.3% in 2015, the lowest since 1996. Although visitor arrivals, which form the bulk of shoppers in the prime shopping district, inched up 0.9% in 2015, much of the increase was because of the low base in 2014 that resulted from aviation disasters. Compared to 2013 - a more representative year - visitor arrivals actually declined by 2.2% attributed to a relatively strong Singapore dollar that made shopping here more expensive.

Retailers in Orchard/Scotts Road also face competition from neighbouring places such as Bangkok, South Korea and Taiwan, which possess distinctive cultures and offer affordable shopping. Apart from weaker business sentiment, their rents were also pressured by the relatively large impending supply in 2016. Mixed-use projects slated to complete in the area include OUE Downtown Gallery (177,000 sq ft), Tanjong Pagar Centre (100,000 sq ft) and Duo Galleria (56,000 sq ft).

Source: Adapted from *The Straits Times*, 5 April 2016

Extract 2: Strategy of Retailers

Many retailers have recently undergone revamps to include private rooms which are fitted with superior furnishings despite the dismal retail climate. They are placing greater emphasis on providing highly personalised services. This encourages shoppers to patronise the physical outlet, it also gives shoppers a sense of exclusivity.

The newly opened Tiffany & Co outlet at Ion Orchard will have its first street-facing store in Singapore, the two-storey outlet also showcases a private viewing space with custom furnishings to include luxuriously-fitted lounge areas. A personal stylist is also present at its store to provide shoppers with fashion advice.

Source: Adapted from *The Straits Times*, 5 April 2016

Extract 3: The Need for Government Intervention

Technological prowess may help a country reap the financial and employment benefits of leadership in a strategic industry. A cutting-edge scientific or technological center can create a variety of spillovers that promote innovation, quality, skills acquisition, and productivity in industries located nearby; such spillovers are the reason that high-tech firms often locate in clusters or near leading universities. To the extent that countries gain from leadership in technologically vibrant industries or from local spillovers arising from inventive activity, the case for government support of R&D within a given country is stronger.

The primary economic rationale for a government role in R&D is that, without such intervention, the private market would not adequately supply certain types of research. The argument, which applies particularly strongly to basic or fundamental research, is that the full economic value of a scientific advance is unlikely to accrue to its discoverer, especially if the new knowledge can be replicated or disseminated at low cost. As a result, market forces will lead to underinvestment in R&D from society's perspective, providing a rationale for government intervention.

Source: Adapted from *Issues in Science and Technology*, 2011

Extract 4: Promoting Research and Development in US

Governments in many countries directly support scientific and technical research; for example, through grant-providing agencies or through tax incentives (like the R&D tax credit). In addition, the governments of the United States and many other countries run their own research facilities, including facilities focused on non-military applications such as health.

Immigration is another path for increasing the supply of highly skilled scientists and researchers. The technological leadership of the United States was and continues to be built in substantial part on the contributions of foreign-born scientists and engineers. And, contrary to the notion that highly trained and talented immigrants displace native-born workers in the labour market, scientists and other highly trained professionals who come to the United States tend to enhance the productivity and employment opportunities of those already here, reflecting gains from interaction and cooperation and from the development of critical masses of researchers in technical areas. More generally, technological progress and innovation around the world would be enhanced by lowering national barriers to international scientific cooperation and collaboration.

Another possible policy response to the market under-provision problem would be to substantially strengthen the intellectual property rights regime; for example, by granting the developers of new ideas strong and long-lasting claims to the economic benefits of their discoveries - perhaps by extending and expanding patent rights. This approach has significant drawbacks of its own, however, in that strict limitations on the free use of new ideas would inhibit both further research and the development of valuable commercial applications.

Source: Adapted from *Issues in Science and Technology*, 2011

Questions

(a) With reference to Table 1, identify the main features of the change in retail sales. [2]

(b) Using evidences in Extract 1, explain two demand factors that led to the fall in the retail sales volume of Singapore's prime shopping district. [4]

(c) Comment on the expected changes in rent by end 2016. [4]

(d) Discuss the usefulness of PED to a retailer such as Tiffany & Co who aims to maximise profits. [6]

(e) Explain the economic objectives of the government in promoting research and development. [6]

(f) Extract 3 states that "market forces will lead to underinvestment in R&D from society's perspective". Discuss the effectiveness of policies undertaken by the US government to achieve allocative efficiency in the R&D market. [8]

[Total 30]

Question 2

Economic Slowdown

Extract 5: Trade dispute

China is sitting atop a glut of gluts. The massive amounts of industrial capacity built to enable the speedy development of the Chinese economy is increasingly idle in the face of a slowdown and transition to services within the maturing behemoth. Prices for products from coal and steel to industrial chemicals have fallen as markets work to clear the glut. Faced with an onslaught of cheap goods from China, some governments are reaching for anti-dumping tariffs like America, which placed punitive tariffs on steel imports from some countries in March.

Cheap exports from China reflect overcapacity that has developed as the Chinese economy has slowed. The resulting cheap Chinese goods may not be proof that China is on the verge of vanquishing all rivals, but rather a reflection of its manufacturers' weakness. That weakness is now being exported. Cheap exports depress prices in foreign markets, most of which are already experiencing worryingly low inflation. While central banks have little room to respond using conventional tools as interest rates are already at historic lows, governments are feeling the pressure to resort to anti-dumping duties.

Source: *The Economist*, 8 April 2016

Extract 6: Low or negative inflation

Falling prices sound like something to cheer. The emergence of the sharing economy is driving down the price of a taxi ride and a bed for the night. More recently tumbling prices for natural resources, especially oil, have boosted the spending power of consumers from Detroit to Delhi. Mark Carney, the governor of the Bank of England, reckons that falling energy prices are "unambiguously good" for the British economy. Mr Carney is not wrong. Nonetheless, the world is grievously underestimating the danger of deflation. The problem is that aggregate prices are dipping in so many places at once. Deflationary pressures are visible far beyond food and energy, and in countries that cannot claim to be leading the charge towards the new economy. Weak demand, driven by austerity, debt and a lack of economic growth is dragging down prices. In the euro zone, where deflation grips tightest, consumer prices fell by 0.6% in the year to January; Germany, Italy and Spain all saw falls. Prices in Greece have been declining for 23 months. Ultra-low inflation is also widespread. America, Britain and China each have inflation rates of less than 1%. This looks less like a welcome fall in prices than a sign of entrenched weak demand.

Deflation poses several risks. One familiar danger is that consumers will put off spending in the expectation that things will get even cheaper, further muting demand. Likewise, if prices fall across an economy but wages do not, then firms' margins will be squeezed and employment will stagnate or decline. Neither of these dangers is yet visible; indeed, America and Britain are seeing strong employment growth. A third, well-known risk is debt deflation: debts become more onerous because the amount that is owed does not fall, even as earnings do. This is a big worry in the euro zone, where many banks are already stuffed with non-performing loans.

The least-understood danger is also the most serious, because it is already here. Deflation makes it harder to loosen monetary policy. When inflation is at 4%, the central bank can take real (i.e., inflation-adjusted) rates well below zero, to -4%, by keeping headline rates at zero. But as inflation falls and turns negative, low real rates get harder and harder to achieve, just when you need them most. Most rich-world central banks have already cut their main policy rates near to zero in order to pep up demand. A growing number of European economies are using negative interest rates to encourage spending, although charging people to put money in the bank will eventually prompt them to keep their money under the mattress instead.

All of which means that policymakers risk having precious little room for manoeuvre when the next recession hits. And sooner or later it will—because of a sharp slowdown in China, say, or the effect of a rising greenback on dollar-denominated corporate debt, or from some shock that comes out of the blue. The Federal Reserve has cut its policy rate by an average of 3.9 percentage points in the six recessions since 1971. That would not be possible today. The break-glass-in-case-of-emergency option of depreciating the currency massively against a fast-growing trading partner is of limited use when so few big economies are growing rapidly and prices are falling, or close to it, in so many places. Policymakers should be more worried than they appear to be, and their actions to avert deflation should be bolder. Governments need to boost demand by spending more on infrastructure; central banks should err on the side of looseness. Next month the European Central Bank will start quantitative easing, and about time too, by buying assets and pumping money into the economy.

Source: *The Economist*, 21 February 2015

Extract 7: Inflation down in Singapore

The economy could witness a longer stretch of negative inflation this year. The recent falls in the consumer price index were largely due to policy-driven drops in housing rents and car prices and these coincided with sharp declines in global oil prices.

The Monetary Authority of Singapore's core inflation measure, which strips out accommodation and private transport costs, came in at one per cent, mainly reflecting lower but positive food inflation and services inflation. The labour market remains tight and the economy continues to expand.

Source: *The Business Times*, 24 April 2015

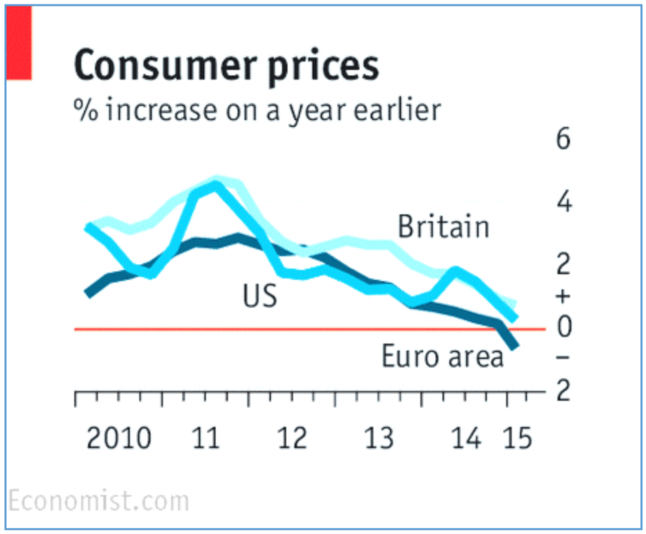
Extract 8: Negative interest rates

Negative interest rates have arrived in several countries, in response to the growing threat of deflation. In June the European Central Bank (ECB) announced that it would pay -0.1% on the money banks deposited with it; in September the rate went even lower, to -0.2%. Denmark, Sweden and Switzerland also have negative rates. Banks, in effect, must pay for the privilege of depositing their cash with the central bank. Central banks' intention of having negative interest rates is to spur banks to lend any reserves that are above the minimum regulatory requirement to willing borrowers, as well as to weaken the local currency by making it unattractive to hold. Both effects, they hope, will raise growth and inflation. In fact, the downward march of nominal rates may actually impede lending. It is difficult to reduce deposit rates below zero while lending rates are falling. Weakened financial institutions, in turn, are not good at stoking economic growth.

Negative rates do not seem to have achieved much on loans. The charges central banks levy on reserves are still relatively modest: by one estimate, Denmark's negative rates, which were first imposed in 2012, have cost banks just 0.005% of their assets. Indeed, the biggest effect of negative interest rates may be on currencies. Since the ECB introduced negative deposit rates the euro has fallen against the dollar by nearly 20%. After Sweden adopted negative rates, the krona fell to a six-year low against the dollar. It is no coincidence that the central bank with the greatest enthusiasm for negative rates is Denmark's: its sole objective is maintaining a fixed exchange rate with the euro.

Source: BBC News, 15 February 2015

Figure 1: Change in consumer prices 2010 – January 2015



Source: *The Economist*

Questions

(a) With reference to Figure 1, compare the change in consumer prices of the Euro area with that of Britain between mid-2011 and January 2015. [2]

(b) From Extract 5, explain how you would decide whether governments are justified in imposing anti-dumping duties on the cheap Chinese goods. [4]

(c) Explain the effect on the consumers and producers of the economy that imposes tariff. [2]

(d) State **two** possible reasons why wages do not fall when prices are falling in an economy. [2]

(e) With the help of a diagram, explain the causes of deflation in various economies. [4]

(f) Assess whether negative inflation is undesirable to an economy. [8]

(g) With reference to the data where appropriate, discuss whether governments should use negative interest rates or another policy measure during a recession with deflation. [8]

[Total: 30]

Section B

Answer **one** question from this section.

3 University education is heavily subsidised in some countries but not others.

(a) Explain how the pursuit of self-interest helps to allocate resources efficiently. [10]

(b) Assess the economic case for the different levels of government subsidies in university education across countries. [15]

4 Free Trade Agreements allows a freer flow of goods, services and investments.

(a) Explain the key macroeconomic objectives of the Singapore government. [10]

(b) Discuss whether establishing free trade agreements is the best way to achieve healthy balance of payments and low unemployment in Singapore and China. [15]