

	NANYANG JUNIOR COLLEGE
	2018 JC2 Preliminary Exam H1 ECONOMICS

Paper No: 8823/01

10th September 2018
Monday

Time : 1400 – 1700 hrs
Duration : 3 hours

READ THESE INSTRUCTIONS FIRST

Do not flip the pages of this paper until you are told to do so.

Write your name, class and name of your economics tutor in the space provided on the writing paper.

Answer **all** questions. The number of marks is given in the brackets at the end of each question. Write your answers on the writing paper provided. If you use more than one sheet of paper, fasten the sheets together.

You are advised to spend several minutes reading through the data and questions before you begin writing your answers.

There are 8 printed pages including this cover page

Question 1: The Sugar Battle

Table 1: Sugar in Selected Economies (1,000 Metric Tons)

Countries	Production		Consumption	
	2016/17	2017/18	2016/17	2017/18
China	9,300	10,250	15,600	15,700
India	22,200	32,445	25,500	26,500
European Union	18,313	21,150	18,700	18,800
Pakistan	6,825	7,425	5,100	5,400
United States	8,136	8,393	10,979	11,181
World total	173,980	191,813	170,773	174,125

Source: United States Department of Agriculture

Extract 1: Tax on sugary drinks will only be partly effective, claims study

Three economists at the Institute for Fiscal Studies have raised questions about the efficacy of the government's soft drinks industry levy. Drinks makers who do not cut sugar levels will have to pay 18p a litre on drinks that have more than 5g of sugar per 100ml and 24p a litre on those that have 8g or more of sugar per 100ml. According to the economists' modelling, young consumers would lower their sugar consumption by more than older individuals in response to a soda tax. The tax, therefore, succeeds in achieving relatively large reductions in sugar among one group," the study notes. However, its impact of sugar tax on population remains to be seen.

The findings have implications for Britain and beyond. A growing number of cities and countries have adopted taxes on sugary drinks to help combat sugar consumption, which is blamed for rising obesity levels. Where do we draw the line for taxing undesirable dietary choices? For example, should a salt tax be implemented given that the overall concern is on long-term human health? To what extent do matters of dietary choices require government intervention? Some people might say that when it comes to food choices, they should have complete freedom in making those choices as they are solely responsible for the health cost that they would incur. However, the cost goes beyond personal choices.

Source: Various

Extract 2: UK sugar industry licks lips over end of EU quotas

The European Union is abolishing its system of quotas for sugar from Sunday 1 October, in one of the biggest changes for British agriculture in recent years. The UK's 3,500 growers of sugar beet – a sweet root vegetable that looks like a turnip – and the country's sole refiner, British Sugar, expect the change to allow them to increase production by 50% annually.

It's an industry that supports nearly 10,000 jobs across the country, helping the UK to consume roughly two million tonnes of sugar a year. About 60% comes from home-grown beets, while another 15% comes from the EU and the remainder is from imported cane sugar. The sugar rush comes as the EU scraps limits on production for the first time since 1968. Britain had been limited to producing little more than one million tonnes a year, which has led to stockpiling following bumper harvests.

British Sugar, a part of the Associated British Foods conglomerate, plans to immediately increase production to 1.4 million tonnes next year from 900,000 tonnes in 2017. But with the vote to leave the European Union, higher taxes on sugary drinks and a government push to wean consumers off unhealthy treats, the industry may face a sticky future. Producers will also be more exposed to the global sugar price as protections recede.

Consumers could benefit from falling prices, although not immediately, according to Callum Macpherson at the City bank Investec. "If prices are passed through to consumers, where you might see a noticeable effect, at some stage, is on the cost of buying a bag of sugar in the supermarket," he said.

Across the EU, sugar production next year is now forecast at 20.1 million tonnes, about 20% more than this year's crop. Imports are expected to fall to 1.5 million tonnes, while exports are forecast to double to 2.8 million tonnes. A government spokesperson said: "The removal of EU sugar beet quotas will enable British growers compete on a level playing field with other sugar producers around the world."

Source: The Guardian, 29 September 2017

Extract 3: Beating diabetes starts with small steps, says PM Lee

Eat right, exercise more, get your health checked regularly and think twice about picking up that can of soft drink. These are Prime Minister Lee Hsien Loong's words of advice to Singaporeans who want to beat diabetes.

While diabetes is often a silent illness, its complications - which range from kidney failure to blindness and even impotency in men - can prove debilitating. Roughly 400,000 Singapore residents have diabetes. A significant proportion of them do not even know it.

Furthermore, total economic costs per working-age patient were estimated to be US\$5,646, of which 42% were excess direct medical costs and 58% indirect productivity-related losses in 2010. Total cost is projected to rise to US\$7,791 in 2050, with the share of indirect costs rising to 65%. By current projections, diabetes in Singapore represents a growing economic burden. Among the working-age population, the impact of productivity loss will become increasingly significant. Prevention efforts to reduce overall prevalence should also engage stakeholders outside the health sector who ultimately bear the indirect burden of disease. The Government alone cannot solve this problem, Mr Lee said. It is a matter of personal responsibility.

The first thing people should do is find out where they stand by going for regular medical check-ups. These do not have to be expensive. From next month, nearly two million Singaporeans can get a basic subsidised health screening for \$5 or less under the enhanced Screen for Life programme. The chances are your doctor will advise you to eat healthy and exercise more as well, Mr Lee said.

A final target of Mr Lee's speech was soft drinks and sugar. These drinks contain refined sugar, which is bad for a person and can increase the risk of diabetes. This problem is especially tricky because drinking such sugary beverages can become an ingrained habit from a young age, he said. "Our children are most at risk because soft drinks are part of their lifestyle."

The Government plans to introduce measures to reduce the amount of sugar in all the soft drinks consumed in Singapore. "But ultimately, what to drink is a personal choice," Mr Lee said. "The best is to drink plain water."

Source: Various

Questions

- (a) (i) Why might the changes shown in Table 1 have led to a decrease in the world price of sugar? [2]
- (ii) Given the information contained in Table 1, identify the country that has had the greatest impact on world prices. Justify your answer. [3]
- (b) Using diagrams, explain what determines the extent of the change in the quantity of soft drinks consumed by the different types of consumers following the imposition of the sugar tax in UK. [4]
- (c) Extract 2 refers to the effects of removing quota on sugar production. Using a supply and demand diagram, explain the effect on the market for sugar in UK of such quota removal. [3]
- (d) Explain the determinants of a rational consumer's decision on whether to consume sugary drinks. [6]
- (e) (i) Using Extract 3, explain why the Singapore government would want 'to reduce the amount of sugar in all the soft drinks consumed in Singapore'. [5]
- (ii) Discuss whether the problem of increased incidence of diabetes in Singapore caused by the excessive consumption of sugary drinks can be better solved by education rather than indirect taxation. [10]
- (f) Instead of discouraging the consumption of sugary drinks, there should be subsidies on healthy dietary choices. [12]

Discuss whether subsidies on healthy dietary choices promote the efficient working of the price mechanism.

[Total: 45 marks]

Question 2: Lessons from Japan and United States

Table 2: 2016 Selected Economic Indicators

	GNI per capita (constant 2010 US\$)	Government Gross Debt to GDP (%)	Unemployment Rate (% of total labour force)	Life expectancy at birth, total (years)
Japan	47,625.9	250.4	3.1	84
United States	52,707	105.8	4.9	79

Source: The World Bank and Trading Economics

Extract 4: Quantitative Easing Around the World

Central banks use quantitative easing (QE) to inject money into the financial system, hoping to boost business spending and stop inflation from falling too low.

The Bank of Japan's most recent QE programme began in April 2013, when central bank boss Haruhiko Kuroda promised to unleash a massive QE programme worth \$1.4tn (£923bn). It formed part of a set of policies known as Abenomics, which hoped to pull Japan out of the deflation it had long suffered and stimulate the economy. Yet statistics show that Abe's economic policies have not achieved the desired results. Japan's GDP only grew 0.4 percent in 2015. With inflation worryingly low and consumer spending floundering, the Bank of Japan went even further last October, introducing negative interest rates for the first time. The move is designed to encourage commercial banks to use excess reserves they keep with the central bank to lend to businesses.

At the same time, the US Federal Reserve (Fed) was spending only a little more per month at \$85bn, compared with \$70bn by the Bank of Japan. But the US economy is almost three times the size of Japan's. As the US economy steadily improved in the aftermath of the Fed's cash injection, the central bank gradually slowed its bond-buying programme. US unemployment fell sharply after QE started and the US economy proved relatively solid. The economy is forecast to grow 3.6% this year by the International Monetary Fund. In 2016, the US central bank is expected to announce two to three interest rate hikes after it increased rates in December for the first time in nearly a decade.

The Bank of England launched QE in March 2009, announcing £75bn of newly created money to buy bonds, when it also cut interest rates to a new record low of 0.5%. However, the Bank later admitted that the richest 10% of households in Britain had benefited the most from QE. The strategy has been criticised by groups representing savers and pensioners because savings rates, have all fallen.

Adapted from: The Guardian, 2016

Extract 5: Japan's credit rating cut as S&P deals blow to Abenomics' credibility

Standard & Poor's (S&P) downgraded Japan's credit rating by one notch from A+ to AA- as it warned that the country's performance would not be "strong enough" to justify a higher grade. The decision will reignite doubts about the efficacy of Prime Minister's Shinzo Abe's three-pronged package of measures intended to lift the Japanese economy out of deflation.

Dubbed Abenomics, Tokyo's policymakers have sought to fend off weak inflation with a combination of monetary and fiscal stimulus, and supply-side reforms.

But S&P suggested that the much-heralded economic revival had failed to materialise. Its downgrade reflects "our expectations that modest growth and stabilisation of price levels will slow an increase in government indebtedness over the next two years and eventually stabilise it", it said. Japan's rating could be cut further if there was an indication "that the government debt burden could rise more significantly than we currently expect", S&P added.

Source: The Telegraph, 16 September 2015

Extract 6: Reduce long working hours to maintain economic vitality: The Japan News

To maintain economic vitality in society amid a declining population, it is essential to improve the environment so women and elderly people can better exhibit their ability and more actively participate in society. The biggest challenge is to address long working hours. Working hours of regular employees in Japan remain high, at around 2,000 hours a year. The ratio of workers with long working hours is also conspicuously high when compared with Europe and the United States. Current labour practices, under which overtime has become normal, have prevented women - whose time is limited because of child-rearing and nursing care of elderly people - from actively participating in society. This has made it difficult for them to balance their work and family life, which has also become a major factor in the declining birth rate. In moving ahead with work style reforms, it is vital to enhance the productivity of every worker.

Non-regular workers must be helped to develop their competence by improving vocational training programs for them or expanding opportunities for them to pursue continuing education at colleges. The bill to revise the Labour Standards Law has, as its central pillars, proposals introducing an employment pattern under which wages will be decided based on work results rather than by number of hours worked.

Source: The Straits Times, 30 September 2016

Extract 7: What's wrong with Japan's Economy

Japan's economy has been in trouble for decades. Massive monetary and fiscal stimulus have so far failed to spur faster growth. This week, the Bank of Japan meets to decide whether to apply yet more economic shock therapy. Here's the situation the country's leaders face:

Table 3

	Above 65 as % of population	Fertility Rate (%)	International migrants as % of population
Japan	26.3	1.4	1.6
United States	14.8	1.9	14.5
<i>Median*</i>	17.8	1.7	12.2

*Median is based on OECD countries

Japan has the world's oldest population, as well as a low birth rate and little immigration, but its growth problems go far deeper.

With the Japanese unwilling to spend, companies are increasingly investing overseas rather than at home. Wages are stagnant and growth has stayed low, with frequent recessions.

Japan's debt burden far outstrips that of other countries, largely a result of the stimulus introduced to help fix the economy. Higher debt led the government to consider a sales tax increase for revenue. Abenomics, Prime Minister Shinzo Abe's rescue plan, which initially relied too much on financial and fiscal measures, has run short of solutions for tackling the structural problems facing Japan's economy. Issues such as an aging population, a weak domestic market and erosion of Japanese firms' competitiveness in the global economic system have not been fundamentally addressed. Given that the real economy has not substantially improved, persisting with monetary easing policies can only be counterproductive. Abenomics has helped to weaken the yen and boost corporate profits but wages and domestic spending have remained fragile.

The monetary stimulus weakened the yen, and until earlier this year exporters felt the benefit but consumer spending hasn't followed and—with the central bank still far from its 2 percent target—neither has inflation.

The Bank of Japan says it will keep taking whatever action is needed to meet its targets and Abe has pledged "bold" measures this fall. Yet with stimulus failing so far to spur growth, economists and policy makers say broader, more dramatic strategies are needed.

Adapted from: Bloomberg and Guardian, 2016

Questions

- (a) Using Table 2, explain why any one indicator might have been a concern to the Japanese government. [2]
- (b) Extract 5 mentions that there is a cut in Japan's credit rating.
 - (i) Explain why Japanese yen fell in value after the cut in credit rating. [2]
 - (ii) Using a diagram, explain how this fall in the value of Japanese yen might affect prices of goods and services in Japan. [3]
- (c) Using Extract 4, discuss the factors that central banks should consider when deciding whether to extend quantitative easing. [7]
- (d) Explain why the Bank of Japan introduces negative interest rates while US's Fed raises its interest rates. [6]
- (e) (i) How is the rate of inflation and standard of living related to each other? [1]
 - (ii) With reference to the data where relevant, explain and comment on whether Japan will have a higher standard of living than US. [8]
- (f) With reference to Extract 7, explain possible reasons why Japanese are unwilling to spend. [4]
- (g) Using evidence from the case study and/or your own knowledge, discuss the policy options that Japan could adopt to address its economic challenges. [12]

[Total: 45 marks]