Name:____________________ Centre No. / Index No.:______/______ Class:__________

PIONEER JUNIOR COLLEGE, SINGAPORE
JC2 Preliminary Examination 2017
Higher 2

ECONOMICS 9757/01

Paper 1 14 September 2017

2 hour 15 minutes

Additional Materials: Answer Paper

*PJC/9757/Paper 1/ 2017

READ THESE INSTRUCTIONS FIRST

Write your Centre number, index number and name 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.

Answer **all** questions.

At the end of the examination, fasten all your work securely together.
Fasten your answers to each question SEPARATELY.

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

This document consists of **7** printed pages and **3** blank pages.

Pioneer Junior College

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Ministry of Education

Answer **all** questions.

Question 1

Pharmaceutical Industry and Healthcare

Extract 1: Pharmaceutical industry gets high on fat profits

Throw in widespread accusations of collusion and over-charging, and banking no doubt springs to mind.

In fact, the industry described above is responsible for the development of medicines to save lives and alleviate suffering, not the generation of profit for its own sake. Pharmaceutical companies have developed the vast majority of medicines known to humankind, but they have profited handsomely from doing so, and not always by legitimate means.

Last year, US giant Pfizer, the world's largest drug company by pharmaceutical revenue, made an eye-watering 42% profit margin. Five pharmaceutical companies also made a profit margin of 20% or more - Pfizer, Hoffmann-La Roche, AbbVie, GlaxoSmithKline (GSK) and Eli Lilly. Pfizer was also discussing a possible merger with Allergan, best known for its Botox anti-wrinkle treatment. If the proposed merger goes through, the combination will be a monster among drug companies. As in other lines of business, such deals are a way to cut costs, gain market clout and achieve economies of scale. They also help firms expand to new markets. In pharmaceuticals the cost of developing new products is exceptionally high compared with many other industries. So it is especially tempting for them to seek to extend their product range simply by buying another firm.

Drug companies are also justifying the high prices they charge by arguing that their research and development (R&D) costs are huge. But drug companies spend far more on marketing drugs to ensure demand than on developing them. They have also been found guilty of mis-branding and wrongly promoting various drugs, and have been fined billions as a result.

No wonder, then, that the World Health Organisation (WHO) has talked of the inherent conflict between the legitimate business goals of the drug companies and the medical and social needs of the wider public. Indeed the Council of Europe is launching an investigation into protecting patients and public health against the undue influence of the pharmaceutical industry.

No matter what the outcome of such investigations, however, the pharmaceutical industry is facing fundamental change, as the traditional model of developing drugs breaks down due to rising costs and scientific advances. The cosy world of big pharmaceuticals is under threat like never before.

Source: Adapted from *BBC News*, 6 November 2014
and *The Economist*, 29 October 2015

Extract 2: High Cost of Diabetes Drugs Often Goes Overlooked

The problem of drug costs is expected to only get worse as Americans get older and fatter. An estimated 29 million people in the US have diabetes and many of them will take diabetes drugs for the rest of their lives. Cost increases for both old and new drugs are forcing many to scramble to pay for them.

For the fourth year in a row, per person spending on diabetes drugs in 2014 was higher than it was for any other class of traditional drug. "The cost of diabetes treatment has been increasing pretty rapidly," says Dr. Glen Stettin, senior vice president for clinical, research and new solutions at Express Scripts, which manages the pharmacy benefits for many companies.

Diabetes occurs when the body can't control the amount of sugar in the blood because of problems making or responding to the hormone insulin. High levels of blood sugar can cause damage to the heart and blood vessels, nerves, kidneys, eyes and feet, among other things.
About 90 percent of people who have diabetes have type 2 diabetes, which is linked to lifestyle factors such as obesity and inactivity. Type 1 diabetes, once called juvenile diabetes, commonly develops among children.

Insulin was considered a wonder drug when it was discovered in 1921. It remains a mainstay of treatment for millions of patients, and yet decades after its introduction there are still no generic forms of insulin available. The lack of generic insulin has hindered price competition for the key diabetes medicine.

Source: Michelle Andrews, www.npr.org, 18 August 2015

Extract 3: Healthcare costs cause concern in Singapore

Singaporeans are rank behind only Japan and Andorra in terms of leading the longest healthy lives in the world. But there are some worrying trends, said Health Minister Gan Kim Yong yesterday, including the ability to sustain the current level of service as the population ages. Costs are of particular concern.

"Many developed countries with ageing populations are facing similar challenges as us," he said. "One important lesson we can learn from their experience is that doing more of the same cannot be the solution."

The Government has already more than doubled its healthcare spending from $4.7 billion in FY2012 to $11 billion this year. The launch of MediShield Life which is a healthcare insurance to cover everyone from birth till death last year has also helped people pay for their healthcare cost. But more needs to be done and he suggested three paradigm shifts:

One of these deals with choosing appropriate care. Some insurance policies for private care provided by Integrated Shield plans pay according to what doctors and hospitals charge. Some people also buy "riders" that do away with the need for the patient to pay anything for major medical treatment. These could lead to a "buffet syndrome" since the cost is paid by someone else, said Mr Gan. "This contributes to rising healthcare costs for everyone and eventually pushes up premiums." This system will have to be studied, he said.

Meanwhile, the ministry has set up an Agency for Care Effectiveness (Ace) to look into the use of high-cost treatments and technologies "to ensure that the outcomes from these technologies are commensurate with these costs". Not all medical tests and treatments are necessary or useful, he said. Countries like the United States, Britain and Japan have launched "Choose Wisely" campaigns to educate people on low-value tests and treatments. This will help patients, caregivers and physicians make more informed treatment decisions and avoid over-provision of services that will drive up costs."

The third push is to increase the years of healthy life for people here, which stood at 70.8 years for men and 73.4 years for women in 2013. Unfortunately, with longer lives, the number of years people here live in ill health has also gone up, and in 2013 stood at 8.9 years for men and 10.6 years for women.

Dr Lily Neo (Jalan Besar GRC) and Dr Chia Shi Lu (Tanjong Pagar GRC) had asked about what Singapore is doing about diabetes, which is fast becoming a major global healthcare burden. To them, Mr Gan said his ministry will be waging a multi-year war against diabetes, a disease which costs Singapore more than $1 billion a year. These include measures to encourage Singaporeans to eat right, exercise more and go for health screenings.

With rising healthcare cost, Singapore is finding it harder to retain its title as the region's top medical tourism hub as patients eye cheaper options elsewhere. It was also noted that the challenges will only intensify as improved standards in neighbouring cities test the price premiums in Singapore, which are further exacerbated by a strong Singapore dollar. It is noted that the Singapore dollar has risen 24 per cent against the Indonesian rupiah over the past two years. This has had significant ramifications as the Indonesian market accounted for 56 per cent of total medical tourism revenues in 2013. This in turn puts multinational drug-makers in Singapore at risk, as medical tourism has been a strong source of demand for high-value medicines.

Source: Adapted from *The Straits Times*, 8 May 2015 and 14 April 2016

Table 1: Health care data for Singapore (current US$), 2010-2014

	2010	2011	2012	2013	2014
Total Health spending per capita	1842	2086	2310	2532	2752
Government spending on health per capita	968	1008	1158	1392	1689

Source: World Bank Group

Table 2: Value of Singapore Dollar (S$ per 100 units of Indonesian Rupiah)

2010	2011	2012	2013	2014
0.0143	0.0142	0.0127	0.0104	0.0106

Source: Monetary Authority of Singapore

Questions

(a) **(i)** Using Table 1, compare the trends of total health spending per capita and government spending on health per capita in Singapore between 2010 and 2014. [2]

(ii) Identify a reason for the difference in the trends observed in (a)(i). [1]

(b) Explain the type of market structure that pharmaceutical companies are likely to operate in. [2]

(c) Explain whether the high price of pharmaceutical drug is caused by demand or supply factors. [4]

(d) "The lack of generic insulin has hindered price competition for the key diabetes medicine." Explain the likely effect on the profits earned by the producer of insulin following the entry of generic insulin. [3]

(e) Discuss the factors that will influence the US government's decision to approve the merger between two larger pharmaceutical firms such as Pfizer and Allergan. [8]

(f) Discuss whether the Singapore government's policies in the healthcare market can be justified. [10]

[Total: 30]

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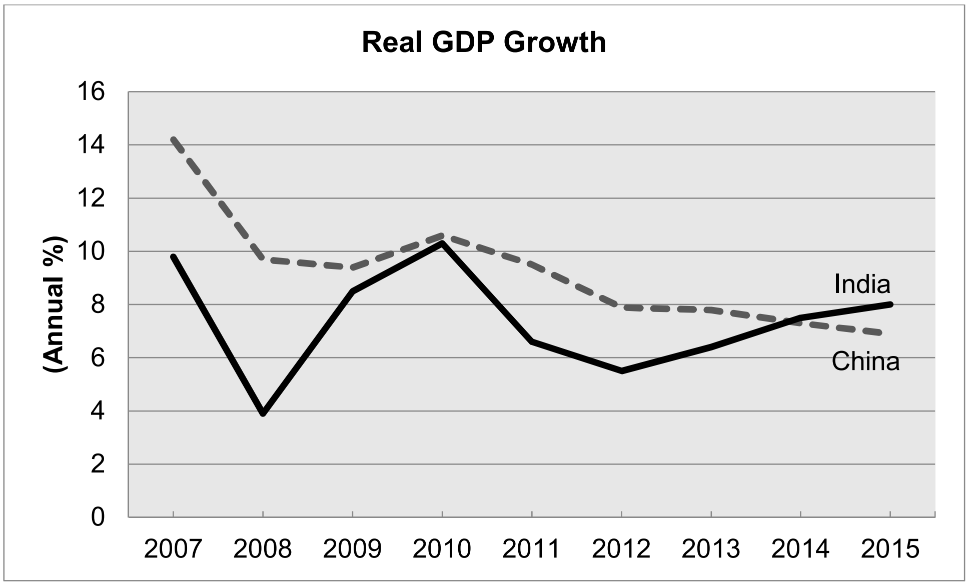
Question 2

Economic Performance, Prospects and Lessons

Figure 1: Real GDP Growth Rates for India and China (2007 – 2015)



Source: World Bank

Extract 4: The Rise of Anti-Globalisation and its Impact in Asia

There is no question that globalization has been a good thing for many developing countries who now have access to more markets and can export cheap goods. However, globalization has become deeply discredited in parts of the developed world. The general complaint about globalization is that it has made the rich richer while making the non-rich poorer. In developed countries, jobs are lost and transferred to lower cost countries. Workers in developed countries like the US and EU face pay-cut demands from employers who threaten to export jobs.

Globalization is an economic tsunami that is sweeping the planet. We can't stop it but there are many policies and strategies we can use to make it more equitable. We can enforce the trade laws, force the competition to play by the same rules, and stop giving our competitors the tools (technology and R& D) to ultimately win the global war. The anti-globalists claim that globalization is not working for the majority of the world. The United Nations Development Program reports that the richest 20 percent of the world's population consume 86 percent of the world's resources while the poorest 80 percent consume just 14 percent. Wage stagnation, insecure jobs and widening inequality between rich and poor are just some of the factors that led to rising anti-globalisation and increase protectionism sentiment seen in the West.

The increase in protectionist measures have profound implications for cross border global flows and negatively impact Asia that have built their fortunes on exports.

Adapted from *Forbes, 6 May 2015*

Extract 5: Economic Review for China

In 2015, China's economy grew 6.9 percent, one of the slowest growth rates among the recent years.

Facing shrinking external demand, expanding overcapacity, increasing competition, intensifying trade protectionism and growing trade disputes, China is in the midst of a fundamental transition.

She is moving from an investment-intensive, export-led model of growth, to a consumption and innovation-driven one. Last year, China's outbound foreign direct investment (FDI) surpassed its inbound FDI for the first time. More investments were made in North America, Europe and other developed economies, where there are more high-quality targets to obtain advanced technologies that can be deployed domestically. For example, ChemChina's acquisition of Syngenta to improve crop productivity, such as crop sensors, agricultural robots, advanced irrigation systems, and genetically modified seeds. Similarly, Haier, a Chinese consumer electronic appliances multinational corporation, announced the acquisition of General Electric's Appliances business for USD 5.4 billion, which will not only allow Haier to expand its presence in the US market, but also provide Haier with great products, state-of-the-art manufacturing facilities and a talented team. China's FDI are also going into developing countries such as India as Chinese manufacturing sector is struggling with rising wages at home.

Back home, e-commerce is turning into a pillar of growth: reducing costs and other barriers to entry, increasing competition, driving down prices, and unlocking new demand. The role of e-commerce has become a dominant feature in the consumer spending landscape. In 2015, the online retail sales of goods and services totalled RMB 3.8 trillion, an increase of 37.2 percent. Recent economic data shows that the contribution from consumption as a percentage of GDP in China is rising, accounted for 52.7 percent of China's GDP in 2015, up from 51.4 percent in 2014. By comparison, consumption expenditure in the US accounted for 68.4 percent of the US GDP in 2015.

To meet the challenges of China's rapid rate of urbanisation such as traffic congestion and poor regional connectivity, the government has implemented a series of initiatives. The 'New-type Urbanization Plan' aims to connect ecological progress, urbanisation quality, expanding domestic demand and rural-urban coordination while the 'Belt-and-Road Initiative' is an infrastructure development plan proposed to improve the connectivity of the country.

Adapted from *China Outlook 2016, KPMG's Global China Practice*, March 2016

Extract 6: Economic Review for India

Having expanded by 7.3 percent in Real GDP in 2015, India has become the world's fastest growing large economy due mainly to her heavy reliance on oil imports and lower prices helped to lift the economy this year. However, growth has been uneven and driven mainly by private consumption and public investment. Continued weakness in global demand and failure of India's trade negotiators to get improved market access for the country's exports make the situation worse. The country's top exports are facing prohibitive tariff and non-tariff barriers in developing and emerging markets. In developed markets, where import tariffs are lower, India's exports are subject to all kinds of non-tariff barriers. All these hurt growth dynamics. For robust and sustainable growth, private investment and exports needs to revive. As inflation eased, the Reserve Bank of India (RBI) has also cut interest rates four times this year as to help stimulate growth.

Prime Minister of India, Mr Modi, jetted across the world this year to help raise India's profile as a business and investment destination, with high profile trips to the United Arab Emirates, the United States, the United Kingdom and China. India's demographics has much to offer: her 450 million labour force is expected to grow to 900 million by 2025, and the average Indian worker can be employed for just 22 percent of the cost of a Chinese worker.

The government in November announced several FDI deregulatory measures in major sectors including broadcasting, aviation, defence and mining. There were also progress made towards making India a manufacturing hub, which will be a key to creating jobs and lowering poverty rates across in India.

However, economists worry that the results will not match the rhetoric. With the appreciation of the US dollar and the US Fed's plan to increase interest rate as the US economy recovers, the Indian

Rupee will come under pressure this year. With investors exiting bonds and emerging market assets to buy US stocks and the Dollar, the Rupee has hit a more than two year-low. The likely resulting surge in inflation could well cause rises in interest rates and retard growth.

Adapted from *The National*, 27 December 2015

Table 3: Selected Economic Indicators (2015)

	China	India
GDP per capita, PPP (Current international $)	14,448	6,126
Current account balance (% of GDP)	2.7	-1.1
Human Development Index	0.74	0.62
Healthcare Expenditure per Capita (US$)	420	75
Income Gini Coefficient	0.42	0.35

Source: Various

Questions

(a) Compare China's GDP growth between 2010 and 2015 with that of India over the same period. [2]

(b) Extract 5 suggests an increase in China investment overseas.

(i) Explain **one** reason why Chinese firms are buying competitor firms overseas. [2]

(ii) Comment on the likely effects of this on China's balance of payments. [4]

(c) Explain the trade-off between inflation and growth in view of the action taken by the Indian government to deal with the weakening of the Indian Rupee. [4]

(d) Discuss whether the data provided are sufficient to compare China's standard of living with that of India in 2015. [8]

(e) In view of the anti-globalisation sentiments, discuss whether globalisation should be the driver of growth for emerging economies such as China and India. [10]

[Total: 30 marks]

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