

# Jurong Junior College 2017 JC2 Preliminary Examination

**ECONOMICS** 

Higher 2 9757/01

Paper 1

24 August 2017

2 hours 15 minutes

# **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.

Answer all questions.

Begin each case study question 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 **7** printed pages and 1 blank page.

#### Answer all questions.

#### **Question 1**

### **Developments in the Logistics Industry**



Source: The Loadstar, June 2016

#### Extract 1: Too little freight, too much space

Although the global air-freight business now handles more than a third of world trade by value, the industry has been under pressure since the financial crisis. Despite the marginal rise in volume of air freight over the past year, airlines' cargo revenues have fallen from a peak of \$67 billion in 2011 to around \$50 billion a year now.

A dramatic fall in sea-freight rates, of more than 75% since 2012 on some routes, as a result of overcapacity among shipping lines has encouraged customers to switch away from sending some non-urgent deliveries by air. In addition, since the financial crisis, there has been no let-up in the growth of passenger air travel demand, so carriers have been expanding their fleets. This means the amount of cargo space in the belly of passenger planes has risen sharply. The result is that average capacity utilisation across the air-cargo business has fallen to 43.5%, the lowest since the crisis.

Source: The Economist, March 2016

#### **Extract 2: Cold Chain Logistics**

Cold chain logistics involves the transportation of perishable goods requiring the maintenance of low temperatures. With its specialised capital-intensive equipment and strict temperature requirements, the cold chain has always been a demanding logistics segment for logistics and supply chain producers. Now the sector is grappling with additional challenges – from increases in the sensitivity, quality standards, and volume of many of its goods, to continually mounting regulations.

Demand for cold chain logistics services comes primarily from the pharmaceutical industry. In the EU, about 80 percent of pharmaceutical products now require temperature-controlled transportation, with similar regulations soon to be rolled out in the United States. Short of producing their products regionally, the industry have little alternative but to employ the use of cold chain logistics services.

Source: Inbound Logistics, July 2015

#### Extract 3: FedEx follows lead of UPS, announces 2017 rate increases

When one domino falls, another is sure to follow. That could be an apt way of describing recent rate hike announcements by the express delivery and parcel shipping duopoly of United Parcel Service (UPS) and FedEx in the US. UPS struck first in early September, announcing rate hikes that will take effect in the coming weeks and months. This week, FedEx followed UPS and announced its respective rate increases for its delivery and parcel services.

These price hikes hit small businesses and individuals the hardest, and not big companies like Amazon that usually manage to negotiate around those hiked rates. For companies that offer free shipping, every cent counts. Such companies have already factored shipping costs into their prices charged to customers, so unanticipated increases eat into their margins.

Source: Logistics Management, September 2016

#### Extract 4: Amazon is using logistics to lead a retail revolution

In 2014, Amazon snapped up stakes in two European logistics companies, Yodel and Colis Privé, to gain partial control of 6,700 delivery trucks, handling 170 million shipments per year in the United Kingdom and France. Last year, the company tapped on the rising tide of disruptive technologies and introduced AmazonFlex, an Uber-like cargo service in major U.S. cities that registers private drivers to deliver Amazon parcels.

If Amazon succeeds in building up its delivery infrastructure, it could ultimately reduce package volume for companies like FedEx and UPS. In addition, new technology is helping startups and other companies get into the delivery market. Some of the industry's most labour-intensive processes are on the way to being fully or partially automated, from warehousing to last-mile delivery.

But FedEx CEO Fred Smith downplayed the speculation that Amazon or any other company could take on the transportation giants in the near future, given the vast scale of their delivery networks and infrastructure, which include thousands of airlines, lorry fleets and expensive warehousing hubs.

Source: Forbes, February 2016

# Extract 5: Logistics industry transformation map to strengthen Singapore's position as a globally leading logistics hub

The logistics industry is a critical enabler of Singapore's economy and our everyday-lives. It connects suppliers to manufacturers and merchants to consumers, both domestically and overseas. In 2015, the transportation and logistics sector contributed 7.4% to Singapore's GDP and employed over 8% of the total workforce.

Under a new industry transformation map that was recently launched, the government will work with key enterprises like A\*Star to implement new technologies and invest in infrastructure solutions that will support automation and increase productivity, attracting foreign direct investment into the country. This transformation of the logistics sector is expected to achieve a value-add of S\$8.3

billion to the economy over the next five years. It is also expected to create 2,000 jobs for professionals, managers, executives and technicians (PMETs) – rank-and-file jobs will become less laborious and more skilled, and the demand for specialist roles will likely increase in the next few years.

Source: Ministry of Trade and Industry, November 2016

#### Extract 6: Carbon emissions from global air freight to rise faster than other transport modes

The intergovernmental organisation International Transport Forum (ITF) has projected that as international freight transport quadruples in volume by 2050, carbon emissions from air freight will grow faster than those from road, rail or sea. The ITF estimates CO2 emissions from air freight will rise from 150 million tonnes in 2010 to 767 million tonnes in 2050, an increase of 411% on a business as usual basis.

Source: Green Air Online, February 2015

#### Questions

- (a) (i) With reference to Figure 1, describe the trend in air freight prices from May [1] 2015 to May 2016.
  - (ii) With reference to Extract 1, and using a supply and demand diagram, account for the overall change in the price and volume of air freight from May 2015 to May 2016.
- (b) Explain the likely value for price elasticity of supply of cold chain logistics. [2]
- (c) Extract 3 mentions that "FedEx followed UPS and announced its respective rate increases for its delivery and parcel services."
   With reference to the data, discuss whether FedEx's recent decision to follow UPS in raising prices in order to increase revenue was well-advised.
- (d) Explain how the new logistics transformation map would affect structural [4] unemployment and income inequality in Singapore.
- (e) Discuss whether addressing market failure caused by negative externalities is the [10] only reason for government intervention in the logistics industry.

[Total: 30]

#### Question 2

#### **Economies of China and United States**

# Extract 7: Weakening of renminbi

China's central bank shocked markets on 11 August when it weakens its currency, the renminbi, by lowering its daily mid-point trading price to 1.87% weaker against the US dollar. A day later, the central bank sent shockwaves again with a second weakening of 1.62% against the US dollar. Fears have mounted of a regional currency war of competitive devaluation as China's moves come on the back of the softening of Japan's yen and the Korean won over the past year and after previous efforts to boost exports and growth failed. China's currency weakening is seen largely as a bid to boost their export competitiveness as export volume continue to weaken. However, this may risk creating other problems for the economy.

Cracks have also begun to appear in other areas in China: capital outflows have surged, bankruptcies are occurring more frequently and bad loans in the banking sector are rising. The central bank had reassured the financial markets that it was not embarking on a steady depreciation and it was just a "one-off weakening." Nonetheless, weakening of the renminbi by about 4% had dealt a blow to investors. They fear that a prolonged currency war that could damage world trade should the US and Japan retaliate and drive down the value of the dollar and yen as well.

Source: The Guardian, 12 Aug 2015

**Table 1: Macroeconomic Indicators of United States** 

	2013	2014	2015	2016
Real GDP growth (% per year)	2.7	2.5	1.9	2.0
Rate of inflation (%)	1.5	0.8	0.7	2.1
Unemployment (% of labour force)	7.4	6.2	5.3	4.9
Current account balance (US\$ billion)	-2.4	-2.2	-2.6	-2.6
Fiscal balance (% of real GDP)	-4.1	-2.8	-2.4	-3.2

Source: Various

### Extract 8: America finally got a rate hike this year.

The US Federal Reserve has raised its target for short-term interest rates by 0.25 percentage points to a range of 0.50% and 0.75%. This move could be the first of many more. Some economists believe that the Fed will need to raise rates more often and perhaps at higher levels if President Donald Trump spends big on infrastructure which could cause prices to accelerate from its low levels.

"With the economy much closer to full employment now and a strong likelihood of a fiscal stimulus next year, we expect the Fed to accelerate the pace of interest rate hikes next year," says Paul Ashworth, chief US economist at Capital Economics.

Source: CNN, 15th December 2016

# Extract 9: A more effective US trade policy is needed to level the playing field

Foreign government subsidies and other market-distorting policies have resulted in massive global steel overcapacity and significant levels of steel imports. This have caused the US numerous plant closures and thousands of job losses. Of particular note, China's steel industry remains state-owned and heavily subsidized. Other major offshore steel producers also continue to use subsidies, tariffs and investment restrictions to protect their markets and expand their steel production and exports. The United States must aggressively enforce US trade laws against injurious dumping and subsidies and respond to foreign government currency manipulation in order to combat unfair trade practices so as to preserve and strengthen her manufacturing base.

Source: www.steel.org assessed on 7 July 2017

# Extract 10: Japan and European Union's huge new trade agreement

Japan and the European Union agreed on an outline for a massive trade deal on the eve of G20 meeting in Hamburg.

EU-Japan negotiations have already began in 2012 but then stalled. It was Donald Trump's election, and the inward turn America is taking, that spurred the EU and Japan to overcome their differences. Both want to show domestic audiences they can deliver signature deals that promise new economic opportunities. They also want to send a clear message internationally that the EU and Japan remain committed to a liberal, free-trading, rules-based world, and they will seek to shape it even if the US would not.

The agreement between Japan and the EU is currently very broad, and there are still plenty of details that need to be hammered out over the next several months before final ratification. But overall, it is designed to do what most free trade deals do: lower and eliminate trade barriers such as tariffs between countries. The core of the agreement aims to increase the flow of Japanese cars to Europe and of European food to Japan. For instance, the Europeans are expected to scrap a 10 percent tariff on passenger cars made in Japan, over a period of seven years. The Japanese, in return, are expected to lower duties on European agriculture products such as cheeses from the Netherlands. Tokyo is also likely to make it easier for European companies to bid for major government contracts, a move that could benefit train makers like Siemens of Germany and Alstom of France.

Source: www.vox.com, 7 July 2017

# Extract 11: Trump's protectionism would not solve unemployment problem

One of US President Donald Trump's key strategies to help get more Americans into work is to introduce protectionist trade measures. The idea is that by raising taxes on goods imported from overseas, it will encourage businesses to bring jobs back to America as it is no longer economical to manufacture elsewhere and then ship to the US.

But Dr Nariman Behravesh, the chief global economist at IHS Markit, told Business Insider (BI) that this effort to try and solve the employment problem is, in fact, the biggest economic risk of 2017 globally.

He said, "If you look at the risks in the coming year, it is political uncertainty — vis-a-vis what Trump may do and what happens with Brexit. If we do go down the path of more protectionist measure, then it could massively impact the US economy, as well as the rest of the world.

According to an HSBC report released in December, if Trump goes ahead with his protectionist trade measures and with the combination of a "hard Brexit", it could kill US\$1.2 trillion worth of global trade. That is because higher tariffs and other trade barriers will reduce the total amount of trade, which means less production and fewer jobs for all, including the Americans. It would also mean more expensive goods, as import taxes are factored into prices".

"For example, if Trump did raise tariffs and costs for Chinese goods, it would hit inflation and hurt poor people because they are typically the demographic that benefits from cheap imports. It hurts the people he says he wants to help. The single biggest challenge is to think about how Brexit and the election of Trump came about," Dr Behraveh said. "A lot of people are angry at being left behind because of technology and globalisation. This is because they feel that they are losing jobs to immigrants but do not have the kind of higher level skills to fulfil new roles being created."

Dr. Behravesh said that companies and governments should instead, "Invest in people's skillsets so that when society evolves through globalisation, workers will be able to cope and change roles without getting left behind."

Source: Business Insider, 16 January 2017

#### Questions

- (a) (i) With reference to Extract 7 and with the aid of a diagram, explain the factors [4] which could lead to the weakening of the renminbi in China.
  - (ii) Discuss whether the weakening of the renminbi is beneficial to the Chinese [8] economy.
- (b) Using data from Table 1, explain the change in standard of living for the United [2] States from 2013 to 2016.
- (c) Extract 8 states that if President Donald Trump 'spends big on infrastructure', it [4] could 'cause prices to accelerate from its low levels'.

Comment on the validity of this statement.

- (d) Explain one consequence to the US economy if prices accelerate from its low [2] levels.
- (e) Discuss the view that imposing protectionist measures rather than engaging in [10] Free Trade Agreements is a better option to create jobs in an economy.

[Total: 30]

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# JURONG JUNIOR COLLEGE PRELIMINARY EXAMINATION 2017

**ECONOMICS** 

Higher 2 9757/02

Paper 2

11 September 2017

2 hours 15 minutes

### **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.

Answer **three** questions in total, of which **one** must be from Section A, **one** from Section B and **one** from **either** Section A or Section B.

Start each essay answer on a fresh sheet of writing paper 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 3 printed pages and 1 blank page.

#### Answer **three** questions in total.

#### Section A

**One or two** of your three chosen questions must be from this section.

1 Crude oil is an important commodity that is used to generate electricity, produce gasoline and other petroleum products used for industrial production. Oil prices have fallen from a peak of over \$110 per barrel in 2014 to below \$40 per barrel in 2015.

Using examples from various industries, discuss why prices of oil-related products fall to a different extent when there is a fall in the price of crude oil. [25]

Microsoft Corporation reported a 27.8% increase in sales the last quarter of 2016 with the release of the new Office 2016 edition. It was reported that a purchase of a single copy of Office 2016 costs \$229 for students and \$349 for home users. Meanwhile, Office Professional 2016 which is targeted at business users includes additional access to Outlook and Publisher and cost \$619.

Source: Microsoft, 2016

- (a) Explain whether the above pricing policies by Microsoft Corporation could be considered as price discrimination. [10]
- (b) Using examples, discuss whether a lack of contestability in an industry is desirable for society. [15]
- When consumers lack accurate or complete information about different goods and services, they often end up making decisions that are less than optimal.
  - (a) Explain how market failure arises in markets for different goods and services due to information failure. [10]
  - (b) Discuss the measures adopted by private agents and the government in solving market failure due to asymmetric information. [15]

#### Section B

One or two of your three chosen questions must be from this section.

- A Chinese mining company, together with a Myanmar conglomerate, will be operating a mega copper production at a site in Letpadaung in Central Myanmar. The mine is one of several Chinese-operated mega mining projects under way in Myanmar that have come under fire from locals because of environmental damage and forced farmland takeovers by officials.
  - (a) Explain the limitations when using economic indicators to compare the economic performance of different countries. [10]
  - (b) Discuss the considerations that are likely to influence the decision of the Myanmar government when approving foreign direct investment in mega mining projects. [15]
- Discuss the view that potential trade-offs are the main reason why governments need to implement a mix of policies in order to achieve their macroeconomic aims in their economies. [25]
- While many will argue that globalisation benefits all countries, there are nevertheless some nations that have done better than the rest.

Source: http://www.livemint.com, 20 January 2017

- (a) Explain possible reasons that could cause a country to lose its comparative advantage in certain industries over time. [10]
- (b) Discuss whether globalisation brings more benefits than costs to different countries. [15]

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#### Suggested Answers for 2017 J2 H2 Prelim Case Study Question 1

- (a) (i) With reference to Figure 1, describe the trend in air freight prices [1] from May 2015 to May 2016.
- Overall trend: Overall, there was a fall in air freight prices from May 2015 to May 2016. [1]
- (a) (ii) With reference to Extract 1, and using a supply and demand diagram, account for the overall change in the price and volume of air freight from May 2015 to May 2016.

### Explain the factors affecting demand and supply

- 1. Change in Price of Substitutes
- 2. Goods in Joint Supply

# Account for the fall in price and rise in quantity of air freight

- With the fall in demand and rise in supply of air freight, the price of air freight has fallen.
- Since Extract 1 mentions that there was a rise in volume of air freight, the rise in supply of air freight must have been greater than the fall in demand for air freight.

# Diagram illustrating rise in supply and fall in demand, with rise in supply being greater than fall in demand

[2m each for demand and supply factor]
[1m for weighing of demand and supply factors and accurate diagram]

(b) Explain the likely value price elasticity of supply of cold chain [2] logistics.

#### PES

- Supply of cold chain logistics is likely to be price inelastic (PES < 1)
- Extract 2 mentions that specialised equipment is needed in order to supply cold chain logistics services. Such equipment tends to be difficult to obtain, hence producers cannot increase quantity supplied readily in response to a rise in price.
- (c) Extract 3 mentions that "FedEx followed UPS and announced its respective rate increases for its delivery and parcel services."

With reference to the data, discuss whether FedEx's recent decision to follow UPS in raising prices in order to increase revenue was well-advised.

#### Introduction

- FedEx's decision to raise prices in order to increase profits was well-advised in light of (1) the
  tacit collusion between the duopoly of UPS and FedEx, (2) the high levels of market power it
  enjoys, and (3) rising costs due to the greater logistical requirements in providing delivery
  services for e-commerce.
- However, given the aggressive entry of e-retailing giant Amazon into the logistics and delivery industry, FedEx will need to be cautious about future increases in price as this may deter major

clients from using its services, causing it to lose market share to a potential disruptor and entrant to the industry.

Thesis: FedEx's decision to follow UPS in raising prices in order to increase revenue was well-advised.

- Tacit collusion between FedEx and UPS operating in a duopoly market structure
- Both firms are engaged in tacit collusion (Extract 3) → no fear of retaliation → FedEx able to
  increase price to increase revenue
- High market power / PED < 1
- FedEx experiences high market power and low levels of competition in the industry due to high barriers to entry → potential entrants deterred → few substitutes available → demand is price inelastic → rise in price leads to rise in revenue

Anti-Thesis: FedEx's decision to follow UPS in raising prices in order to increase revenue was not well-advised.

- Higher contestability of market due to disruptive technologies
- Rise of disruptive technologies such as automation (Extract 4) → higher contestability of market → not well-advised for FedEx to raise prices as this would allow potential entrants to capture market share

#### Conclusion

#### Stand

 Although FedEx's decision to follow UPS in raising prices may allow it to increase its revenue in the short term, it may not be well-advised for FedEx to continually raise prices in the long term

# Evaluation: Non-pricing strategies [or any other valid criteria]

Level	Knowledge, Application, Understanding, and Analysis	Marks
L2	Well-developed analytical arguments of why FedEx's decision to follow UPS in raising prices in order to increase revenue was and was not well-advised.	4 – 6
	Good reference made to evidence from the data to support the arguments made.	
L1	Descriptive and weakly-developed arguments. Answer is one-sided.	1 – 3
Е	Reasoned conclusion and judgment that critically evaluates whether FedEx's decision to follow UPS in raising prices in order to increase revenue was ultimately well-advised.	1 – 2

(d) Explain how the new logistics transformation map would affect [4] structural unemployment and income inequality in Singapore.

#### Impact on structural unemployment

 Transformation through implementation of new technology and automation → low-skilled workers made redundant → lack relevant skills by expanding industries → structural unemployment increases

#### Impact on income inequality

- Low-skilled workers who find themselves structurally unemployed as a result of the transformation of the logistics industry would have no income
- In contrast, firms competing to attract high-skilled workers to fill specialist roles would bid up wages. Thus, high-skilled workers would earn higher wages.
- Hence, income inequality between low-skilled and high-skilled workers would increase.
- (e) Discuss whether addressing market failure caused by negative externalities is the only reason for government intervention in the logistics industry.

Thesis: Reason for government's intervention in the logistics industry is because of market failure caused by negative externalities

Explain the presence of negative externalities in the logistics industry:

- Negative externalities are costs to third parties who are not directly involved in the production or consumption of a good, and such costs are not reflected in the price of the good / no compensation is paid to third parties.
- There are significant negative externalities associated with production of logistics services
- In addition, Extract 6 mentions that air freight results in pollution due to carbon emissions, which leads to global warming that harms the environment and livelihoods of farmers and fishermen, as well as poor air quality resulting in health and respiratory problems for people.

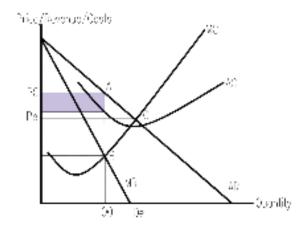
Explain how the existence of negative externalities leads to market failure using a diagram

- The marginal private benefit (MPB) of producing logistics services is the revenue obtained from each additional unit produced
- The marginal private cost (MPC) of producing logistics services is the costs of production of each additional unit produced
- Due to the existence of negative externalities, there is a divergence between MPC and marginal social cost (MSC); MSC = MPC + MEC
- If left to the free market, producers who consider only their own self interests (i.e. their profit margins) would produce at Qp, where MPB = MPC
- However, the socially optimal level of output is at Qs, where MSB = MSC
- Since Qs is lower than Qp, there is overproduction of logistics services
- Between Qp and Qs, MSC is greater than MSB, resulting in a deadweight loss as shown by the shaded area in the diagram. Therefore, the presence of negative externalities in the logistics industry leads to an inefficient allocation of resources in the market, which would warrant government intervention in the industry.

# Anti-Thesis 1: Reason for government's intervention in the logistics industry is because of market dominance

 Market dominance is one of the causes of market failure. Market dominance occurs when firms have significant market shares due to strong barriers to entry or imperfect information.

- The duopoly of FedEx and UPS means that they dominate the market.
- Market dominance allows these firms to have monopoly power, and so control the output to the market, and thus the price. As such, they are able to restrict output, and produce at the profit level maximising level of MC=MR, where P>MC, instead of the socially optimal level where P=MC.



- As seen in the above diagram, firms produce at the output level Qo, and charge the maximum price that consumers are willing and able to pay for that number of unit of goods, P0. However, the **allocatively efficient level** is at Qe, Pe.
- At a level lower than Qe, such as in the case when a firm has significant market power, consumers value one additional unit of the good more than it costs to produce it, and societal benefit can be increased by producing more of the good.
- However, in this case, the firm with market dominance will not produce at the allocatively
  efficient level. There will be a deadweight loss of ABC from the underconsumption of the good,
  showing that societal welfare is not maximised.

Anti-Thesis 2: Reason for government's intervention in the logistics is because of the important role they play in promoting economic growth and employment

- A well-developed logistics industry would make a country more attractive to foreign direct investments (FDI) and thus attract FDI into the country. Overall, investments (I) would increase, leading to a rise in AD resulting in actual growth. The rise in capital stock, improvements in the quality of labour as well as the sharing of technological knowledge leading to technological advancement would increase the productive capacity of the economy leading to a rise in LRAS resulting in potential growth.
- Furthermore, for a country such as Singapore, improving productivity and innovation in the logistics industry is crucial in cementing her status as a global trading hub and would facilitate trade between her and other countries.

#### Conclusion

#### Stand:

- Although one reason for government intervention in the logistics industry is market failure due to the presence of negative externalities, this may not be the only reason.
- Governments may also wish to intervene in the logistics industry due to market dominance as well as for macroeconomic reasons, especially since the logistics industry provides critical services for many other industries to function.

Argument <u>for</u> economic growth and employment being the main reason for government intervention

- Based on the reasons given for government intervention, it is seen that there are trade-offs between solving market failure due to negative externalities and promoting productivity in the logistics industry to promote economic growth. The former seek to reduce production while the latter increases it. However, it is believed that the latter is the relatively more important reason for government intervention in some countries such as Singapore. According to Extract 5, the transportation and logistics sector contributed 7.4% to Singapore's GDP and employed over 8% of the total workforce. This means that the industry constitutes a significant proportion of her GDP and total workforce in itself, even ignoring the benefits that would accrue due to the growth of other industries should the logistics industry become more productive and innovative. Thus this is a more important reason for intervention.
- However the government can attempt to achieve the objectives simultaneously by subsidising R & D activities that reduce the extent of pollution caused by the logistics industry.

Level	Knowledge, Application, Understanding, and Analysis	Marks
L2	Well-developed answer on the different reasons for government intervention in the logistics industry, namely, the existence of <b>negative externalities</b> , <b>market dominance</b> , and to promote <b>economic growth</b> and employment.	5 – 7
	Max 5m if only 2 reasons are provided	
L1	Descriptive and weakly-developed answer. Answer is one-sided.	1 – 4
Е	Reasoned conclusion and judgment that critically evaluates whether negative externalities, market dominance or macroeconomic objectives are the <b>main</b> reason for government intervention in the logistics industry. Conclusion considers the trade-offs that may occur in the government's pursuit of different objectives.	1 – 3

# JJC J2H2 Prelim Exam Case Study 2

#### **Suggested Answers**

(a)(i)With the aid of a diagram, explain the factors which could lead to the weakening of the renminbi in China. [4]

Factor 1: Weak exports

• Export volume weakens and assuming that the price remain constant, export revenue falls. This leads to a fall in demand for renminbi in China.

# Factor 2: Short-term capital outflow

• Speculation that renminbi will weaken leads to large capital outflow from the Chinese economy. This leads to an increase in supply of renminbi.

#### Insert diagram

Explanation of factors – 3m Diagram – 1m

Max 2m if factors are not from extract + correct diagram

# (ii)Discuss whether the weakening of the renminbi is beneficial to the Chinese economy. [8]

#### <u>Introduction</u>

The weakening of the RMB would have both positive and negative impact on the Chinese economy. In this case, the Chinese government allows the RMB to weaken to boost their export price competitiveness.

# Thesis: Weakening of the renminbi is beneficial to the Chinese economy

- When the RMB depreciates, the prices of Chinese exports become relatively cheaper and its imports become relatively more expensive
- Given that demand for China's exports and imports are price elastic
- This will result in an increase in export revenue and a decrease in import expenditure.
- The rise in net exports will lead to an increase in AD
- In addition, a depreciation could lead to an increase in foreign direct investment inflow as investors find it relatively cheaper to invest.

Overall, the improvement in both the current and capital account may lead to a BOP surplus. The rise in (X-M) and I will lead to an increase in NY through the multiplier process.

### Anti - thesis: Weakening of the renminbi is not beneficial to the Chinese economy

- Weakening of RMB would make imports relatively more expensive.
- increase the cost of production for firms
- Short-run aggregate supply falls and result in cost-push inflation.
- However, this is likely to be a less significant problem for China as she is well-endowed with resources and is not heavily dependent on imports.
- A weaker RMB can also quicken the withdrawal of short-term capital from China
- Further worsening of capital account.

- The scenario of competitive devaluation might also happened.
- As such, weakening of the RMB may not be beneficial to the Chinese economy.

#### Conclusion

In conclusion, whether the weakening of RMB is bad or not for China depends on the nature of economy, the magnitude and the causes of the weakening as well as the priority of the government at that particular point of time.

- Make use of CS evidence to support stand

Level	Knowledge, Application, Understanding, And	Marks
	Analysis	
L2	Well-developed answer that analyses how the weakening	4-6
	of the RMB will impact the Chinese economy	
L1	Descriptive answer of how the weakening of the RMB will	1-3
	impact the Chinese economy	
E	Well-justified stand on whether the weakening of RMB	1-2
	will benefit the Chinese economy	

# (b) Using data from Table 1, explain the change in standard of living for US from 2013 to 2016. [2]

US has been having positive real GDP per capita growth. This means that real income level has been rising for the average American citizen and this means that more goods and services are available for consumption by the people. With this, they are able to enjoy a higher quantitative standard of living.

Any relevant point on either quantitative or qualitative SOL – 2m

- (c) Extract 8 states that if President Donald Trump spends big on infrastructure, and spark demand for many goods, it would cause prices to accelerate from its low levels. Comment on the validity of this statement. [4]
  - Aggregate demand in the country increases.
  - Given that the US economy is already close to full employment
  - Producers will have to compete for the use of the scarcer resources
  - This will lead to demand pull inflation in the economy. [2m]
  - However, infrastructure spending by the government has benefits on the US economy
    as it increases the quantity of capital goods in the economy.
  - In the long run, productive capacity of the US economy will rise, causing LRAS to increase.
  - Sustained economic growth is achieved and US economy is able to achieve non-inflationary economic growth. Thus prices may not rise. [2m]
- (d) Explain one consequence to the US economy when prices accelerate from its low levels. [2]

### Fall in C, I, EG and employment

- When inflation is high and moves in an erratic manner, business uncertainties about future costs of production and revenues increase
- Producers are less willing to make long-term commitments and this discourages investments
- Fall in investment which decreases aggregate demand leading to a fall in national income and hence economic growth. + This will mean that the employment opportunities in the US will fall
- Prices of exports become relatively more expensive and if demand for exports is price
  elastic, this will cause export revenue to fall. Demand for imports will rise as people
  switched to the cheaper imports. Import expenditure will rise. Thus net exports fall.

### 2m for any point explained – Can be any relevant point

# (e) Discuss the view that imposing protectionist measures rather than engaging in Free Trade Agreements is a better option to create jobs in an economy. [10]

#### Introduction

The increased trade movement among countries have not benefited all equally and for some, it actually worsens their economy. For those who benefitted, they experience economic growth which create more jobs for their people, enabling them to earn more income and enjoy a higher standard of living.

# Thesis: Protectionist measures is the better option to help an economy protect and create jobs

The justification for protectionism by the US is to protect their domestic industry and to safeguard their employment. As mentioned in Extract 11, the US government intends to impose a tax on imported goods such as steel.

#### Insert diagram

- Increase in domestic steel production generates employment as seen in diagram.
- Government also gains revenue from the imposition of the tariff They can then use the tax revenue to implement policies that can help to improve the employment situation.
- At the same time, US steel companies will be discouraged from relocating overseas and then importing steel back to the US due to the tariffs.

#### However,

- Higher price of imports could lead to inflation in the economy and raise the cost of living for the people.
- Such an approach also does not solve the root cause of unemployment if it is due to structural weaknesses. For example, as stated in Extract 8, it says that there is a mismatch of skills between the US workers and the new jobs being created.
- This also Increase the cost of production of industries that use the product as an input, for example in the case of a car-making industry.
- This makes some industries to experience a rise in cost of production thus making them less competitive.
- Retaliation may also occur which hurts export industries.

# Anti-thesis: FTA is the better option to help an economy create jobs

A Free Trade Agreement (FTA) is a legally binding agreement between 2 or more countries to enjoy a myriad of benefits such as tariff concessions, preferential access to certain sectors,

easing investment rules, faster entry into markets and Intellectual Property protection. FTA can bring about both benefits and costs to a country and if benefits exceeds costs, the decision to sign such agreements is supported.

- US will benefit greatly from lowered tariffs in other countries as it means that her exports will be cheaper now due to lower or removal of tariffs. This leads to an enlargement of export market.
- FTA also allows countries to tap on the theory of CA and specialize in goods that she can produce at a relatively lower opportunity cost.
- FTA, can also lead to an increase in foreign direct investment due to preferential treatment or ease of investment rules. Country can also benefit from transfer in technology.

#### However,

- FTAs often take a very long time to be formed as it is a very complex and contains many details.
- An economy may not necessary gain from being in a FTA in terms of employment. The lower prices of imports can cause inefficient domestic industries to close down.

#### Conclusion

Whether protectionist measures or FTAs is better depends on the current state of the economy and the problems that she is facing.

- Given the unfair trade practices and the structural rigidities faced in a country such as US, protectionistic measure may be a short-term measure.
- In the longer term, benefits from FTAs is likely to outweigh costs as exports expand according to Theory of CA.

Level	Knowledge, Application, Understanding, and Analysis	Marks
L2	Well-developed explanation how protectionist measures or FTA can help create jobs in the US + evaluation of the 2 policies	5 – 7
	Good reference made to evidence from the data to support the arguments made.	
L1	Descriptive and under-developed explanation how protectionist measures or FTA can help create jobs in the US	1 – 4
Evaluation		
Е	Reasoned conclusion and judgment that critically evaluates whether protectionist measures or FTA is better in creating jobs for the US	1 – 3

#### JJC J2H2 Prelim Essay Q1

1 Crude oil is an important commodity that is used to generate electricity, produce gasoline and other petroleum products used for industrial production. Oil price has fallen from a peak of over \$110 per barrel in 2014 to below \$40 per barrel in 2015.

Using examples from various industries, discuss why prices of oil-related products fall to a different extent when there is a fall in the price of crude oil. [25]

#### Introduction

In the free market, price of oil is determined by the interaction of demand and supply forces. Excessive increase in supply exceeding demand can lead to oil price falling.

Explain how a fall in price of crude oil will reduce the cost of production of firms producing oil-related products causing their price to fall.

However, the extent of fall in prices tend to vary among different products and in different markets due to various reasons.

# Relative PED values of the products

- The demand for some products such as a particular brand of laptop such as Acer tend to be price elastic. This is due to the availability of substitutes from many different brands. Given an increase in supply due to cheaper cost of production, this leads to a less significant fall in price.
- On the other hand, the demand for some products such as petrol is price inelastic as there are **few substitutes** to fuel vehicles. Due to its price **inelastic** demand, when there is an increase in supply, petrol will experience a **more significant** decrease in **price than** for a price elastic demand curve. Explain with aid of diagram.
- However, the elasticity of the demand for products may change over time.

# Existence of monopoly/market power

- Some firms, for example, petroleum companies in Singapore have high barriers to
  entry. With their high monopoly power as a result of high barriers to entry, they have
  a greater ability to set prices. Although they may experience a lower cost of production
  as a result of lower crude oil prices, they may choose to pass down less cost savings
  to consumers in the form of lower prices.
- However, if there is an increase in contestability of its market, a firm is more willing to reduce price.

#### Changes in fuel tax and subsidies

• Some countries may choose to increase petrol tax or reduce subsidies for petrol following a fall in crude oil prices. This again offset any large fall in prices of petrol.

# Mutual interdependence in oligopolistic firms

 Firms in oligopolistic market tends not to change their prices and there is price stickiness due to the existence of kinked demand curve. In addition, in the case of collusive oligopolies, there is also a tendency to collude and hence prices may not fall.

### Existence of Economies of Scale

Some firms are able to enjoy greater internal economies of scale as their firms expand.
 Thus with a fall in prices resulting in a larger output, they are able to enjoy more cost

- savings from internal economies of scale. Assuming that they pass on this cost savings to consumers, they are able to lower prices to a larger extent. Give example.
- However as output increases, some firms may experience internal diseconomies of scale instead. There may be greater miscommunication resulting in less efficiency and higher unit cost of production.

#### Proportion of total cost related to oil-related input or use of electricity vs labour cost

Labour cost may constitute a large proportion of total cost and a rising labour cost may
offset the fall in cost as a result of cheaper electricity and cheaper petroleum raw
material used. Give example.

# Explain that the fall in price of products is also affected by changes in demand

• Fall in supply may be partially offset by rising demand leading to a less drastic rise in prices in some products. Explain with example.

# **Conclusion**

Stand: A combination of factors affect the extent of price fall in different firms following a fall in price of crude oil.

In reality, different types of firms experience different extent of fall in prices in their products as a result of a fall in crude oil prices. This is usually due to a combination of factors mentioned above.

Differences depends on:

Criteria 1: Nature of products

Criteria 2: Constraints to a firm reducing price due to economic outlook, business risks and uncertainty.

Criteria 3: Constraints due to government intervention

# Marking scheme

Level	Knowledge, Application, Understanding, and Analysis	Marks
L3	Well-developed analytical explanation of the relevance of different factors that influences the extent of fall in price.	15 – 20
L2	Descriptive explanation of the relevance of different factors that influences the extent of fall in price.	9 – 14
L1	For an answer that shows some knowledge of relevance of different factors that influences the extent of fall in price.	1 – 8
	Evaluation (5m)	
E3	For a well-reasoned judgement on the reasons for the differences in fall in prices.	4 - 5
E2	For an attempt at judgement	2 – 3
E1	For an unexplained judgement	1

#### JJC J2H2 Prelim Exam Question 2

Microsoft Corporation reported a 27.8% increase in sales the last quarter of 2016 with the release of the new Office 2016 edition. It was reported that a purchase of a single copy of Office 2016 costs \$229 for students and \$349 for home users. Meanwhile, Office Professional 2016 which is targeted at business users includes additional access to Outlook and Publisher and cost \$619.

Source: Microsoft, 2016

- a) Explain whether the above pricing policies by Microsoft Corporation could be considered as price discrimination. [10]
- b) Using examples, discuss whether a lack of contestability in an industry is desirable for society. [15]

# Answers for part a

Price discrimination is the practice of charging different prices for the same good for reasons not associated with cost differences, either by charging different prices for different units of output or charging different groups of people different prices. To be considered to be practising PD, a firm must satisfy three conditions: able to control market price, able to separate the markets to prevent reselling and also ensure a different price elasticity of demand in the separate markets.

# **Body:**

# Pricing policy #1: Office 2016 is charged to home users and free to students and teachers

## Identify type of price discrimination:

- Third degree price discrimination Two different groups of consumers' students and the home population
- Single license copy of Microsoft 365 provided to both group of users are same

#### **Explain how the three conditions for PD are satisfied:**

#### **First Condition**

- Microsoft Corporation is a **price setter** (i.e. able to influence prices of Microsoft 365)
- High barrier to entry into the industry due to the fixed high cost involving in the research and development area
- Protected by Intellectual Property law and through the patent licensing of their software and technology

#### **Second Condition**

- Different groups of consumers can be clearly segregated through the conditions being imposed by Microsoft Corporation.
- Students will have to register themselves with Microsoft Corporation using their school email
- Impossible for the student to resell the single license of Microsoft 365 as once accessed it via their computer, the license will be invalid

#### **Third Condition**

- Students who purchase the Microsoft 2016 are likely to have a lower income as compared to the normal home users. Demand is more price elastic as the price of the single license of Microsoft 2016 take up a larger proportion of their income.
- Home consumers tend to have a higher income as compared to the students.
   Therefore their demand is more price inelastic as the price of the single license of Microsoft 365 take up a smaller proportion of their income.

# <u>Pricing policy #2: Office 365 Business Class charged at a higher price to business user</u> compared to home users

 Not a form of price discrimination because there are cost differences between providing Office Professional to home and business users.

Office Professional business class includes additional access to access to Outlook and Publisher for business.

 Higher cost will be incurred for Microsoft Corporation as they will still need to manage the servers of the business email and ensure a higher quality video call in Skype for business.

#### **Conclusion:**

Microsoft Corporation are probably practising PD with regards to the normal Office 2016 for students and the other type of consumers as they fulfil the three conditions of price discrimination and that both group of consumers will enjoy the same production. However, the act of charging higher prices for Office Professional for Business class and normal Office 2016 is not PD as it is a different production for the two group of consumers.

#### **Marking Scheme**

Level	Knowledge, Application, Understanding, and Analysis	Marks
L3	Well-developed analytical explanation of the pricing policies of Microsoft Corporation on Office 2016 between different users and Office 365 between Microsoft Professional for Business Class.	
L2	Descriptive explanation of the pricing policies of Microsoft Corporation on Office 2016 between different users and Office Professional for Business users.	
L1	For an answer that shows descriptive knowledge of the different types of pricing policies of Microsoft Corporation	1 – 4

[15]

#### Answers for part b

#### Introduction

- Define contestability of a market:
  - Contestable markets are those that are served by a small number of firms but that are characterised by competitive equilibria and thus allocative and productively efficient outcomes because of the ease particularly of short-term entry but also exit in the market.
  - o Contestable markets are characterised by 'hit-and-run' competition.
  - Primarily determined by the level of barriers to entry and not the number of firms in the industry. Hence a lack of contestability would means that market has a high level of barriers to entry which allows incumbent firms to raise prices due to the lack of entry of potential competitors.
- Society's interest comprises consumer's and producer's welfare in addition to issues like
  equity. Besides prices, consumer welfare is also affected by consumer choices and quality
  of service.

#### Body:

#### Thesis: Lack of contestability is desirable for the society

# Point 1: Desirable as it allows firm to reap internal EOS

- Firms located in industries that lack contestability would also operate on a larger scale of production and would be able to reap internal economies of scale.
- With specialisation, the production process is more efficient, leading to lower unit costs.
   Firms are able to enjoy higher profit margins due to lower unit costs of production. This means that its MC, could be lower than that of a PC industry
- In this case, it is not true that the monopolist always charge a higher price

**Examples:** It is desirable to a large extent if the industry give rises to natural monopoly for example the utilities market such as water, electricity and gas.

[Explain how Public Utilities Board is a form of natural monopoly and as they enter the market and expand quickly to enjoy internal economies of scale.]

# Point 2: Desirable as it allows firm to engage in research and development.

- With the supernormal profits earned, firms located in industries that lack contestability
  have greater ability to engage in innovation to improve the quality of products and
  differentiate products to cater to the different tastes and preferences of consumers.
- Benefit consumers in terms of better quality of goods as well as a wider variety of goods and services produced.

**Examples:** It is desirable to a large extent. For example, in the automobile market, different companies such as BMW have introduced new safety mechanisms to improve the safety of drivers and passengers and improved engine systems to enhance fuel efficiency. This would lead to greater consumer welfare.

#### Point 3: Desirable as it prevents wastage of resources

• Incur less advertising expenditure to avoid wastage of resources and prevent hurting consumers' welfare as it does not bring about any improvements in the product.

**Examples:** For firms located in contestability industries like restaurants, bubble tea shops and even hair salons, they will have to engage in aggressive advertising in order to establish the brand loyalty and increase the demand for their product.

# Anti-Thesis: Lack of contestability is not desirable for the society

#### Point 1: Not desirable as it promotes allocative inefficiency

- Explain how allocative efficiency (AE) is achieved
- Firm located in industries that lack contestability are also often dominant firms with great market power and are able to charge higher prices where P> MC
- Make consumers worse off in terms of higher prices

# Point 2: Not desirable as it promotes inequity

- Due to a lack of contestability in the industry, the firm is also able to make supernormal profits, not only in the short run but also the long run.
- Results in a less than equitable income distribution as there is seen to be an accumulation of wealth by the minority (producers) at the expense of the majority (consumers), making the public 'worse off'.
- Unlike the other industries with contestability, they have less power to exploit consumers by raising prices and restricting output.

**Examples:** This is particularly true in the case of industries which lack contestability, for example, Microsoft in the operating software market due to patent rights would tend to charge consumers a high price for the use of Microsoft software even though they may enjoy a lower marginal cost.

Due to a lack of contestability (in which potential entrants are deterred), oil retailers like Shell Petrol, Exxon Mobile are also able to collude to set higher prices, enabling them to earn higher profits at the expense of the consumers who have to pay higher prices for petrol.

# Point 3: Not desirable due to lack of variety

- May only produce one type of good. As a result, consumers lose out due to lesser variety of goods enjoyed in the market.
- On the other hand, firms in the monopolistic competition industry due to contestability
  will compete to provide better quality products to their customers which are more
  reliable and with more appealing features and variety.

**Example:** There are many different brands of bubble tea shop in Singapore. The biggest competitors in the industry are LiHo! and Koi whereby both constantly compete to come up with new favours to cater to the consumers taste and preference.

# Conclusion

# <u>Stand</u>

In conclusion, firms that locate in industry that lack contestability bring about both benefits and costs to society. Although benefits are reaped in terms of greater innovation and greater economies of scale enjoyed, there is a trade-off in terms of potential abuse of market power and greater inequity depending on various criteria.

<u>Criteria of Judgement: Any 2 – 3 points</u> <u>Different type of industries</u>

Different objectives of firms

Government regulation

# Marking Scheme for part b

Level	Knowledge, Application, Understanding and Analysis	Marks
L3	For a well-developed explanation of how a lack of contestability in different industry is desirable and is not desirable for society.	
	Answer uses well-reasoned criteria of judgment to assess the reasons why it is desirable and why it is not desirable with well-explained examples.	8 – 10
L2	For a descriptive explanation of how a lack of contestability in different industry is desirable and is not desirable for society.  Answer compares the desirability with examples.	5 – 7
L1	For an answer that shows a descriptive knowledge of how a lack of contestability in different industry is desirable and is not desirable for society.	1 – 4
Level	Evaluation	Marks
E3	For an evaluative assessment which synthesises economic arguments to arrive at well-reasoned judgments about the lack of contestability in different industries and how it may affect different industries.	4 – 5
	These include consideration of a firm's other objectives and the possibility of government intervention.	
E2	For an answer that makes some attempt at an evaluative appraisal about the lack of contestability in different industries and how it may affect different industries.	2 – 3
E1	For an unsupported judgment about the lack of contestability in different industries.	1

#### 2017 J2H2 Prelim Essay Question 3

When consumers lack accurate or complete information about different goods and services, they often end up making decisions that are less than optimal.

- (a) Explain how market failure arises in markets for different goods and services due to information failure. [10]
- (b) Discuss the measures adopted by private agents and the government in solving market failure due to asymmetric information. [15]

### Part (a) Answer Outline

### <u>Introduction</u>

Market failure may arise in markets for different goods and services due to information failure. Information failure refers to economic agents not having perfect or equal information and it can occur in two instances – firstly, it exists when some agents in an economic transaction have imperfect knowledge; secondly, it exists when an agent in an economic exchange has more information than the other, resulting in asymmetric information. Asymmetric information in turn leads to market failure due to adverse selection and moral hazard.

### **Body**

#### Imperfect Knowledge

Imperfect knowledge arises when individuals are unable to value their private benefits or private costs of consuming certain goods and services correctly due to incorrect or incomplete information about the actual private benefits or costs.

#### [Explain using any valid examples of goods]

#### Asymmetric Information

Asymmetric information arises when the economic agents involved in a transaction have different amounts of information. It refers to the situation in which a market is characterised by either buyers or sellers having more or superior information than the other party.

#### Adverse Selection

Adverse selection arises due to asymmetric information. It refers to the situation in which the price and quantity of goods or services in a given market is altered due to the hidden characteristics of the good or service before the transaction has been completed. As a result, the product or service is mainly demanded by agents who offer the worst return for other economic agents.

### [Explain using any valid examples of goods]

#### Moral Hazard

Moral hazard is a situation where an economic agent, having more information about its actions or intentions, has a tendency to take more risks because the costs that could result are not borne completely by the party taking the risk. The party with more information thus has a tendency or incentive to behave inappropriately from the perspective of the party with less information.

# [Explain using any valid examples of goods]

# Conclusion

Since information failure leads to market failure in different product and service markets, there is a need for governments to intervene in these markets as well as for economic agents involved in the transaction to adopt measures that would solve the problems arising due to information failure.

# **Marking Scheme**

Level	Knowledge, Application, Understanding, and Analysis	Marks
L3	Well-developed explanations of how market failure arises due to information failure (imperfect information, adverse selection and moral hazard).  Good use of relevant examples of <b>different products and services</b> to illustrate explanations.	8 – 10
L2	Descriptive explanation of how market failure arises due to information failure.  Answer uses relevant examples that may not necessarily be of different products and services to illustrate explanations.	5 – 7
L1	For an answer that shows descriptive knowledge of how market failure arises due to information failure.	1 – 4

#### Part (b) Answer Outline

Discuss the strategies adopted by private agents and the government in solving market failure due to asymmetric information. [15]

#### Introduction

- Market failure arises due to asymmetric information as explained in Part (a). Thus, there may be a need for governments to implement policies to correct such market failure.
- With other sources of market failure (e.g. externalities, public goods etc.), private agents have little or no incentive to remedy the market failure. As a result, governments often have to intervene through the implementation of policies in these markets.
- However, in the case of asymmetric information, private agents often have an incentive to correct the market failure by adopting strategies such as signalling, screening, copayments and no-claim discounts.
- This is in contrast with governments, which implement legislation such as Lemon Law, mandatory participation in health insurance, as well as provision of clear and comprehensive information directly to consumers.

# **Body**

I: Explain how private agents' strategies and government policies work to solve market failure due to asymmetric information + Limitations

#### Private agents' strategies to overcome adverse selection

- Signalling
- Screening

#### Private agents' strategies to overcome moral hazard

Changing incentives

# Government policies to overcome adverse selection and moral hazard

- Legislation
- Provision of information

# Conclusion

#### Stand + Any valid criteria

- In conclusion, it would be more effective if a combination of private agents' strategies and government policies were implemented.
- Equity concerns and the need for government intervention

# Marking Scheme

Level	Knowledge, Application, Understanding and Analysis	Marks
L3	For a well-developed explanation of how private agents and governments implement strategies and policies respectively to correct market failure due to asymmetric information	8 – 10
L2	For a descriptive explanation of how private agents and governments implement strategies and policies respectively to correct market failure due to asymmetric information  Answer merely states the limitations of the strategies adopted by private agents as well as the policies implemented by governments	5 – 7
L1	For an answer that shows a descriptive knowledge of the strategies adopted by private agents and the policies implemented by governments to correct market failure due to asymmetric information.	1 – 4
Level	Evaluation	Marks
E3	For an evaluative assessment which synthesises economic arguments to arrive at well-reasoned judgments about other considerations that need to be taken into account.	4 – 5
E2	For an answer that makes some attempt at an evaluative appraisal about other considerations that need to be taken into account.	2 – 3
E1	For an unsupported judgment about the other considerations that need to be taken into account.	1

#### JJC J2H2 Prelim Essay Question 4

A Chinese mining company together with a Myanmar conglomerate will be operating a mega copper production at a site in Letpadaung in Central Myanmar. The mine is one of the several Chinese operated mega projects under way in Myanmar that have come under fire from locals because of environmental damage and forced farmland takeovers by officials.

- (a)Explain the limitations when using economic indicators to compare the economic performance of different countries. [10]
- (b)Discuss the considerations that are likely to influence the decision of the Myanmar government when approving foreign direct investment in mega mining projects. [15]

#### Part (a) Suggested Outline

#### Introduction

• Economic indicators can be useful when comparing economic performance of different countries. However, there are limitations of each economic indicator.

# **Body**

- Define GDP/ GNP and explain the measurement problems when using GDP/GNP
- Define Unemployment rate and explain how it can be underestimated.
- Define Inflation rate and explain how CPI may be inaccurate due to differences in weights.
- Define Balance of payments and explain how it is difficult to track the volumes of transactions across countries.

#### **Marking Scheme**

Level	Knowledge, Application, Understanding, and Analysis	Marks
L3	Well-developed analytical explanation of the limitations of at least 3 to 4 economic indicators to compare the economic performance of different countries.	8 – 10
L2	Descriptive explanation of the limitations of economic indicators to compare the economic performance of different countries.	5 – 7
L1	For an answer that shows descriptive knowledge of the limitations of economic indicators.	1 – 4

(b) Discuss the considerations that are likely to influence the decision of the Myanmar government when approving foreign direct investment in mega mining projects. [15]

#### Part (b) Answer Outline

• Many considerations can influence whether the foreign direct investment (FDI) by China in Myanmar should go ahead. These are mainly the benefits and costs for Myanmar economy.

# Consideration 1 – Impact on Myanmar's economic growth

- One of the benefits gained from the investment project (I) is an increase in economic growth. Elaborate.
- However, the magnitude of the multiplier and its eventual impact on the economy's national income is dependent on the amount of withdrawal (leakages) from the circular flow of income, such as the marginal propensity to save, import and tax. The higher the withdrawals (leakages), the smaller the size of the multiplier will be.
- The extent of this reduction in unemployment can be significant as copper mining is a labour intensive industry this can create many direct and indirect jobs through the multiplier effect.
- In the long run, investment will increase the capital stock in Myanmar and this will increase the productive capacity of the economy. This helps to increase potential growth. In addition, investment in better quality machinery and technology will also enhance efficiency and increase productivity in the country.

# **Consideration 2 – Income distribution in Myanmar**

- However, whether the benefits trickle to the people depends on the income distribution in Myanmar. The benefits may concentrate on the hands of a few rich government officials at the expense of the farmers whose land has been taken over with little compensation.
- This will result in the farmers being worse off as they lose their ability to grow crops and
  earn income as their farmland has been taken over by government officials. This may be a
  significant factor contributing to the urban versus rural income inequality as a vast of the
  majority of foreign direct investment in Myanmar is concentrated in the urban sector,
  despite only a small proportion of the population lives in these areas.

### **Consideration 3 – Extent of negative externality**

Also, as mentioned in the prose, this mega project would cause environmental damage to
the country. There are negative externalities involved in the building and operation of the
copper mine due to the water and air pollution caused. There could also be severe soil
erosion as plantations are cleared for mine digging. This would worsen the qualitative
aspect of living.

### Consideration 4 – Expectation of future prices and demand & State of economy

• In addition, the expected price and future demand is also another factor for consideration. If prices of copper are expected to fall in the future due to a weak commodity market, this can reduce expected future profits causing the project to be unsustainable in the future.

#### Conclusion

- In conclusion, many factors are being considered in deciding whether to go ahead with the mega project in Myanmar. These factors are weighed in terms of the costs and benefits that it brings to the economy and its people. However, the most important consideration that the Myanmar government has to make is the impact on her overall economic performance as foreign direct investments like the mega project are able to assist in the development of local economies like Myanmar by increasing financial resources for development, boosting export, generating employments and skill level of local employees and by enhancing technological capabilities.
- However, the extent of these benefits still largely depends on:
  - the characteristics of the Myanmar economy such as the skills of its labour force.
  - on whether government policies are in place to minimise the costs of approving the foreign direct investments.
  - o on the current state of the economy. Myanmar is faced with years of mismanagement and economic sanctions.

### **Marking Scheme**

Level	Knowledge, Application, Understanding and Analysis	Marks
L3	For a well-developed explanation of the considerations that are likely to influence the decision of the Myanmar government when approving foreign direct investment in mega mining projects.	8 – 10
L2	For a descriptive explanation of the considerations that are likely to influence the decision of the Myanmar government when approving foreign direct investment in mega mining projects.	5 – 7
L1	For an answer that shows descriptive explanation on how foreign direct investment in mega mining projects can benefit Myanmar.	1 – 4
Level	Evaluation	Marks
E3	For an evaluative assessment which synthesises economic arguments to arrive at well-reasoned judgments about other considerations that are likely to influence the decision of the Myanmar government when approving foreign direct investment in mega mining projects.	4 – 5
E2	For an answer that makes some attempt at an evaluative appraisal.	2 – 3
E1	For an unsupported judgment about the other considerations of a government.	1

# **JJC J2H2 Prelim Exam Question 5**

Discuss the view that potential trade-offs is the main reason why governments need to implement a mix of policies in order to achieve their macroeconomic aims in their economies. [25]

# **Introduction**

- List and explain the macroeconomic aims.
- List and explain the policies which can be implemented.

### **Body**

Thesis: Potential trade-offs is the main reason why government need to implement a mix of policies in order to achieve the macroeconomic aims in their economies

- Explain 2-3 trade-offs and link back to the question as to why it will require government to implement a mix of policies.
  - o EG conflict with internal price stability
  - o EG conflict with healthy BOP
  - o EG conflict with negative externalities

Anti-thesis: There are other reasons why government need to implement a mix of policies in order to achieve the macroeconomic problems in their economies

- Provide 2-3 other reasons and link back to the question as to why it will require government to implement a mix of policies.
  - o Constraints faced by the government such as small multiplier
  - Fiscal debt
  - o Root cause of problem

### **Evaluative conclusion**

# Stand + 2-3 well elaborated justification

- Combination of factors
- Priority of government

	Knowledge, Application/Understanding and Analysis	
L3	For a well-developed explanation of how potential trade-offs and other factors may lead to government implementing a mix of policies to achieve their macroeconomic aims in their economies.	15-20
L2	For a descriptive explanation of how potential trade-offs and other factors may lead to government implementing a mix of policies to achieve their macroeconomic aims in their economies.	9-14
L1	For an answer that shows a descriptive knowledge of how potential trade- offs and other factors may lead to government implementing a mix of policies to achieve their macroeconomic aims in their economies.	1-8
	Evaluation	
E3	For an evaluative assessment which synthesises economic arguments to arrive at well-reasoned judgments on how various factors would lead	4-5

	to government implementing a mix of policies to achieve their				
	macroeconomic aims in their economies.				
E2	For an answer that makes some attempt at an evaluative appraisal about				
	how various factors would lead to government implementing a mix of				
	policies to achieve their macroeconomic aims in their economies.				
E1	For an unsupported judgment about how various factors would lead to				
	government implementing a mix of policies to achieve their				
	macroeconomic aims in their economies.				

#### 2017 J2H2 Prelim Essay Q6

While many will argue that globalisation benefits all countries, there are nevertheless some nations that have done better than the rest.

Source: <a href="http://www.livemint.com">http://www.livemint.com</a>, 20 January 2017

- (a) Explain possible reasons that could cause a country to lose its comparative advantage in certain industries over time. [10]
- (b) Discuss whether globalisation brings more benefits than costs to different countries. [15]

### Part (a)

#### Introduction

Define comparative advantage.

Explain that differences in relative opportunity cost explain the differences in comparative advantage in different countries.

A country thus can lose its comparative advantage in industries when there are increases in its opportunity cost as a result of changes in factor endowments and technological changes.

# **Body- Reasons for loss of CA**

#### Failure to keep pace with advancement in technology

A country may not experience a rapid advancement in technology unlike that of other countries. R&D and technology play key roles in strengthening the comparative advantage. Thus a country that fails to keep up will cause her to lose out in terms of efficiency and productivity. As a result, it experiences a higher cost of production compared to others. Give examples.

### Changing natural and human endowments

There are also changing natural and human endowments. Natural resources may get depleted over time and the country will lose its comparative advantage in these industries if it is not able find substitutes to maintain its comparative advantage. Give examples such as depletion of crude oil.

Human endowments such as the quantity and quality of labour can also change with time. A country can experience a fall in the quantity of labour due to falling population growth or changes in a government's migration policy. This results in shortage of labour which leads to rise in wages. Quality of labour can also fall as a country's education system fails to keep up with that from other countries. As a result cost of production rises causing OC to rise.

#### Globalization

Globalization has resulted in greater flow of trade, foreign direct investment and migration among countries. With the interconnectedness, it becomes relatively easier for certain industries in an economy to tap on the transfer of knowledge, skills, technology to lower the opportunity cost of production. However countries may also face greater competition with globalization causing them to lose their CA.

#### **Government policies**

Lastly, government policies can enhance or worsen the comparative advantage that a country has. Government policies such as increasing corporate tax or removing tax incentives or changing labour policies to reduce immigration and employment of foreign workers can also cause a country to lose its comparative advantage.

# <u>Part (b)</u> Discuss whether globalisation brings more benefits than costs to different countries. [15]

# **Introduction**

- ❖ Globalisation refers to the increased integration of national economies into the international economy through greater trade, foreign direct investment, capital flows, migration, and the spread of technology.
- ❖ There are potential benefits of globalization and this varies from country to country. However, there are also costs to everyone too. The extent whether benefits is more than costs depends on the characteristics of the economies. It also depends on the conditions in the economy and the mitigation policies that governments put in place to reduce the costs.

#### **Body: Gains**

# Trade and its benefits to producers

- Globalisation leads to the expansion of export markets according to the Theory of Comparative Advantage. Elaborate
- ❖ Benefits is larger for small countries which are dependent on trade for growth.
- Benefits from increase in employment is larger for less developing countries producing labour-intensive goods.
- ❖ Globalization also provides more opportunities for sourcing cheaper and better quality imports from other countries. Cheaper imports will help to curb imported inflation.
- ❖ Benefits from cheaper and greater variety of import is very important for small countries such as Singapore as she lacks natural resources and is dependent on imports. Impact is larger for small countries which are dependent on trade for growth.

#### Capital flows

- Globalisation encourages both long-term and short-term capital flows across countries. The inflow of foreign direct investment (FDI) into a country creates job opportunities and results in a multiplier effect on the national income, achieving actual economic growth. The increase in capital stock increases productive capacity, LRAS and brings about potential economic growth and benefit society.
- The inflow of short-term capital enables local firms to gain access to foreign funds for their businesses. They may also be able to borrow at a cheaper rate with the abundance of foreign funds.
- Impact is large for a small and developing country which is dependent on FDI.

#### Labour

- ❖ With a freer movement of labour, smaller economies like Singapore with limited manpower are now better able to utilize workers from other economies to fill up the vacancies requiring a lower level of skills. The greater labour mobility due to globalisation can help a small country overcome its constraint of a small local labour force to attain economic growth.
- Impact is large in a small country which lacks labour. Developed countries however may experience more brain drain as the highly skilled workers leave to the developing countries which lack such manpower.

#### Costs

#### Structural unemployment

- However, globalization also has its costs. As the comparative advantage of countries changes over time, some industries like call center services start to move out from highcost to low-cost countries. This will result in structural unemployment
- ❖ Impact might be large for countries where there is less policies to address such structural unemployment. Problem may also be larger for developed countries that experience a loss of CA of their labour-intensive products to the less developing countries.

#### Income gap

The influx of low-skilled foreign workers into a country also tends to compete with the low-skilled local labour. The increase in the overall supply of low-skilled labour tends to reduce the wages of these workers. On the other hand, the increase in demand for high-skilled labour relative to the limited supply raises their wages. Thus, income disparity problem tends to worsen.

#### Vulnerable to external shocks

- As countries become more interconnected and integrated, small and open economy like Singapore tends to be more vulnerable to external shocks due to the contagion effect.
- Small open export oriented economies such as Singapore with a large trade sector (as a % of GDP) are more vulnerable to such threats.

# Conclusion and evaluation Stand and Justification

- Depends on characteristics of economy
- > Depends on the policies that are used to mitigate the costs of globalisation.

#### Marking Scheme for Part a

Level	Knowledge, Application, Understanding, and Analysis		
L3	Well-developed analytical explanation of the factors that leads to loss of CA.	7 – 10	
L2	Descriptive explanation of the factors that leads to loss of CA.	4 – 6	
L1	For an answer that shows descriptive knowledge of the factors that leads to loss of CA.	1 – 3	

#### Marking Scheme for Part b

Level	Knowledge, Application, Understanding and Analysis		
L3	For a well-developed explanation of the benefits and costs of globalisation and its extent in different countries.	8 – 11	
L2	For a descriptive explanation of the benefits and costs of globalisation as well as compares the extent for different types of countries.	5 – 7	

L1	For an answer that shows a descriptive knowledge of benefits and costs of globalisation.	1 – 4
Level	Evaluation	Marks
E2	For an evaluative assessment which weighs the benefits and costs of globalisation to arrive at well-reasoned judgement.	3 – 4
E1	For an answer that makes some attempt at an evaluative weighing of the benefits and costs of globalisation in different countries.	1 – 2