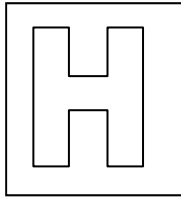


Candidate Name: \_\_\_\_\_

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## 2018 End-of-Year Exams Pre-University 2

**H1 ECONOMICS**

**8823/01**

Paper 1

**10 September 2018**

**3 Hours**

Additional Materials: Answer Paper

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

Answer **all** questions.

At the end of the examination, fasten your work to question 1 & 2 **separately**.  
The number of marks is given in brackets [ ] at the end of each question or part question.

This question paper consists of 9 printed pages and 1 blank page.

**[Turn over**

Answer all questions.

### **Question 1: Gambling**

#### **Extract 1: Gambling Addiction, A Double Edged Sword?**

Gambling addiction can best be described as the compulsion to gamble or place bets despite this behaviour having a negative impact on the gambler's life. Financial rewards associated with winning is an obvious benefit. However, psychologists suggest that gamblers also enjoy the thrill associated with not knowing in advance whether they will win or lose when they place their bets. Their research shows that the "rush" from narrowly losing a bet was nearly as high as the pleasure gained from winning.

However, when debts begin to climb and other negative consequences start piling up, those who are addicted to gambling cannot resist the overwhelming urge to place another bet. The repeated action of gambling has been found to actually cause changes in the addict's brain similar to that seen in the brain of someone addicted to drugs or alcohol. Once this occurs, professional treatment is usually the only way to overcome the obsessive need that accompanies gambling addiction.

Financial consequences such as loss of money and assets, as well as high levels of unmanageable debt, are the most obvious effects of gambling addiction. Without treatment, those suffering from gambling addiction may find themselves selling off major assets including cars and homes, borrowing money from loan sharks, and even stealing money from friends, relatives, the workplace or anywhere else they can.

Lying goes hand in hand with problem gambling as the addict attempts to hide their addiction from those close to them. This dishonesty can cause serious strain on relationships, shattering the trust built between loved ones. Work or school obligations often suffer, as a problem gambler may neglect these responsibilities in favour of feeding their gambling addiction.

Source: [www.thecabinsingapore.com.sg](http://www.thecabinsingapore.com.sg) [Accessed 03 Aug, 2018]

#### **Extract 2: Gambling in the UK**

Gambling has become a big business in Britain, as illustrated by the fact that during the year from April 2016 to March 2017, British households spent nearly £73 billion on it even as betting charges are rising. Once the costs were subtracted, UK betting firms generated profits of £13.9 billion and employed over a 106,000 employees. Over the last six years the amount spent on gambling has been rising rapidly while gambling companies' profits have been steadily increasing. Most of the growth can be attributed to the rising popularity of remote betting. During the period 2001 to 2016 revenues generated from this segment alone had increased by over 400%. This sector is expected to continue to grow strongly although not at the high rates seen in its earlier phase.

Source: [www.gamblingcommission.gov.uk](http://www.gamblingcommission.gov.uk) [Accessed 03 Aug 2018]

**Table 1: The different segments of the market in gambling in the UK****Total Revenue (£, million)**

Type \	Apr 11 - Mar 12	Apr 12 - Mar 13	Apr 13 - Mar 14	Apr 14 - Mar 15	Apr 15 - Mar 16	Apr 16 - Mar 17
Non-remote	4,964.09	5,219.62	5,340.38	5,492.94	5,432.21	5,655.41
Remote*	710.19	932.61	1,134.66	2,239.00	4,251.82	4,716.16

*\*Remote segment refers to gambling activities such as online betting and online casinos where the physical presence of the customer is not required.*

Source: [www.gamblingcommission.gov.uk](http://www.gamblingcommission.gov.uk) [Accessed 03 Aug 2018]

**Extract 3: Gambling becomes easily accessible**

In recent years gambling in the UK has become more convenient. A large segment of the population, especially the young are text-savvy and comfortable going online. The development of mobile gambling apps and online access means customers do not have to leave their homes to gamble. In addition, Tony Blair's decision to deregulate the gambling industry in 2004 made it easier for bookmakers to advertise on the television and radio. The deregulation of the gambling industry also enabled betting shops to install more betting machines, a move that the Daily Mail, a national newspaper, has been highly critical of.

Betting firms have spent nearly half a billion pounds on TV advertisements since 2012. Companies offering sports betting, bingo, online casino games and poker spent £118.5m on TV spots in 2015, compared with £81.2m in 2012, according to the figures compiled by media analysts Nielsen. The 46% rise in annual spending over the period means the industry has shelled out a combined £456m since 2012. The bookmakers have succeeded in convincing sports fans that watching sport and betting on sport should be bought and consumed together.

Source: The Guardian [15 July 2016]

**Extract 4: Gambling addiction under control**

The pathological and problem gambling rate among Singaporeans and permanent residents was 0.9 per cent in the 2017 survey by the National Council on Problem Gambling. It inched up from 0.7 per cent in the 2014 survey, but the change is not statistically significant, the council's spokesman said. The survey is done every three years to find out the extent and pattern of gambling here. Pathological gambling is more serious than problem gambling.

In fact, the gambling addiction rates have been falling since the first survey was done in 2005. While the 0.9 per cent prevalence rate is small, it still translates into a sizeable number of people who could be hard-core gamblers, given that the study is nationally representative of the population. In the 2017 Population Statistics report, there were about 3.1 million Singaporeans and permanent residents aged 20 and older. So 0.9 per cent of that works out to about 28,000 gambling addicts here.

**[Turn over**

A Ministry of Social and Family Development (MSF) spokesman pointed out that the Government has put in place a slew of social safeguards to prevent Singaporeans from getting hooked, such as the \$100 daily entry levy to enter a casino. He also said that fewer Singaporeans are going to the casinos as the novelty has worn off, without giving more details.

Those who counsel hard-core gamblers, such as Mr Billy Lee of Blessed Grace Social Services, expressed surprise at the falling prevalence rate over the years, given that they are seeing more addicts seek help in the past few years. They pointed out that many addicts may not be truthful when answering survey questions, hence that could affect the findings. Others noted that the council has done a lot to raise awareness of problem gambling and extend aid to those affected, which could have brought the addiction rates down.

Meanwhile, the council has upped the number of centres offering help to problem gamblers from two to six and has also started a new e-counselling service in July last year, where people can get counselled anonymously over the phone or the Internet. Its National Problem Gambling Helpline received close to 20,000 calls and webchats for help last year.

Source: The Straits Times, Singapore, 28 Mar 2018

#### **Extract 5: Las Vegas's economy is on the brink of a boom.**

After a decade of pain and recovery, no place is better poised to boom than Las Vegas in 2018. Unemployment rate today is 4.7% compared to 13.7% in 2009. Jobs are coming back in the construction industry, with big pending projects like the Raiders stadium, Resorts World Las Vegas, the Las Vegas Convention Centre expansion and renovation, as well as new home construction. Other sectors like tourism, healthcare, hospitality and transportation continued to add employees to the payroll.

With respect to population, Las Vegas is now designated as the fastest-growing major metropolitan area in the United States. The number of residents is at an all-time high with half of new arrivals being retirees who were described as "a key gaming demographic" for the casinos.

At the end of November 2017, the number of unsold housing units for sale had fallen 30 percent over the past year, representing less than two months of supply. Prices have responded sharply, with Las Vegas joining Seattle as the only two metros in the US with home prices growing by double digits over the past year.

Housing isn't the only cyclical industry that drives the Las Vegas economy: Tourism plays a big role as well. Las Vegas was on pace for record convention attendance in 2017, which should grow further in a strong 2018 economic environment. This might be why after a quiet decade, big casinos are starting to rumble and make land acquisitions for future development. A return to even a modest casino development cycle would only add fuel to Las Vegas's economic expansion.

Sources: Various.

**Questions**

- (a) (i) Define price elasticity of demand. [1]
- (ii) What can you conclude from the evidence in Extract 1 about the likely value of price elasticity of demand for gambling? [2]
- (iii) With reference to Extract 2 and the aid of a diagram, explain how the increase in betting charges accounts for the change in the UK's household expenditure on gambling. [4]
- (b) Compare the trends between the non-remote and remote gambling revenues in the UK from April 2011 to March 2017. [2]
- (c) With reference to Extracts 2 and 3, account for the growth of the gambling industry in the UK and comment whether the change in supply is likely to be more important than the change in demand in explaining the growth. [7]
- (d) With the aid of a diagram and the use of the concept of price elasticity of supply, explain how the economic recovery in Las Vegas had caused housing prices to grow "by double digits". [5]
- (e) Discuss the extent to which the gambling industry has improved the standard of living in the Las Vegas. [8]
- (f) (i) Explain what is meant by negative externalities. [2]
- (ii) Explain why gamblers have underestimated their private cost. [2]
- (iii) With reference to the UK as well as Singapore, assess whether the actions of the two governments have corrected or worsened market failure in gambling in the two countries. [12]

**[Total: 45 marks]****[Turn over**

## Question 2: Economic Challenges in India and Japan

**Table 2: Some economic statistics for India from 2013 to 2017**

	2013	2014	2015	2016	2017
Budget position (billion rupees)	−5.03	−5.11	−5.35	−5.37	−5.91
Real GDP growth (annual %)	6.39	7.41	8.15	7.11	6.62
Inflation rate (annual %)	10.91	6.65	4.91	4.94	–
Unemployment rate (%)	3.46	3.41	3.49	3.51	3.52

Source: World Bank Group and Trading Economics, accessed on 11 August 2018

**Table 3: Some economic statistics for Japan from 2013 to 2017**

	2013	2014	2015	2016	2017
Budget position (billion yen)	−39.25	−28.26	−25.54	−24.23	−24.59
Real GDP growth (annual %)	2.00	0.37	1.35	0.94	1.71
Inflation rate (annual %)	0.35	2.76	0.79	−0.12	0.50
Unemployment rate (%)	4.03	3.58	3.33	3.13	–

Source: World Bank Group and Trading Economics, accessed on 11 August 2018

### Extract 6: Reasons why Indian economy is poised to grow faster in 2018

The Indian economy is poised to grow faster than expected in the year 2018, against the backdrop of rising trade protectionism, increasing crude oil prices and volatile market conditions Deloitte Voice of Asia report said.

There is high optimism in domestic demand in the form of consumption and revival in small-scale business activities. Moreover, India's jump on World Bank's Ease of Doing Business Index is helping build optimism in India's story and is consequently attracting more investors to the country.

There is also a lot of focus on infrastructural development. The government in the Budget 2018 allocated a massive amount to infrastructure. "India has taken steps to collaborate with international partners to speed up the process of infrastructure building," the report said.

In addition, the global economy has turned a corner, with demand rising robustly since late-2016 and it is likely to accelerate further. More than 75% of the world economy is now enjoying an upswing, with forecasts anticipating global growth to rise to 3.7% in 2018, from 3.2% in 2016. As the global economy is in its heights after recovering from the shocks of 2008 crisis, India should take the benefit of this opportunity. India's ability to stave off the economic gales was helped by the fact that it is much less dependent than most countries on global flows of trade and capital.

Source: Financial Express, 14 March 2018

### **Extract 7: India's unemployment crisis**

India's economy has a lot going for it: it's already huge, and still growing relatively fast, at 7.2%, surpassing even China's 6.8%. But the positive narrative could lose momentum, and start the beginning of a solid downward trend. To put it simply, India's economic growth has been largely jobless. The unemployment rate in India hit its highest level in 16 months in March 2018 at 6.23%. There's an accumulated shortage of around 80 million jobs, but the number of jobs created in the financial year 2018 is an estimated 600,000.

India's manufacturing sector has been sluggish for a long time now. India's labour laws are restrictive, imposing all kinds of red tape on factories of more than 100 workers, which discourages businesses from thinking big. There is also the problem of poor infrastructure. While efforts are on to create productive, well-paying, formal jobs, truth is structural changes have occurred. Traditional jobs have disappeared and are not coming back. As the fourth industrial revolution advances, new skills requirements will further challenge its youth.

Emphasising job creation is one of the country's most urgent priorities. Indian GDP needs to grow at 10% to be able to produce enough jobs for the 12 million people joining its workforce every year.

Another concern for India, amid rapid economic progress, is high economic inequality resulting in uneven distribution of wealth. The gap has been widening – the richest 1% of Indians now hold 73% of the country's total wealth, according to Oxfam India. And according to economists Thomas Piketty and Lucas Chancel, the top 1% of earners pocketed nearly a third of all the extra income generated by economic growth between 1980 and 2014.

Former Indian Prime Minister Manmohan Singh said while economic growth remains a high priority for the country, there is a growing concern that the commitment to ensuring that disparities and inequality do not grow is weakening.

Source: Forbes, 3 May 2018

### **Extract 8: India gets its first interest rate hike in 4 years**

India's central bank has hiked interest rates from 6% to 6.25% for the first time in over four years amid worries over rising prices.

The bank cited a recent spike in oil prices as one of the main factors in its decision. Crude oil crossed \$80 a barrel last month before falling back a little to trade at just over \$75 on Wednesday. Rising oil prices has sparked concerns that inflation could take the edge off India's robust economic growth.

Overall inflation rose from 3.9% to 4.2% between March and April 2018. An economist predicts that stronger growth and rising inflation could result in further interest rate rises in the months to come.

Source: CNNMoney, 6 June 2018

**[Turn over**

### **Extract 9: Bank of Japan maintains its negative interest rates**

Bank of Japan (BOJ) maintained its ultra-loose monetary policy and kept its interest rate at minus 0.1 percent, a move adopted in 2016. Negative interest rate is a policy when banks do not get paid an interest for parking their money with the central bank. Instead they are charged themselves and have to pay the central bank for depositing the money. This penalises the banks for hoarding their cash, thereby giving them the incentive to loan the money out.

The continued fiscal stimulus has helped the economy expand moderately. However, BOJ also maintained its cautious assessment on prospects for hitting its elusive 2 percent inflation target. "Consumer price growth is in a range of 0.5 to 1 percent in July 2018," the BOJ said. That was a slightly bleaker view than in April where central bank said inflation was moving around 1 percent. Japan's weak inflation data raise fears over deflation.

BOJ suggested a range of factors that could contribute to the weak inflation data, including deeply entrenched attitudes cause by deflation and low growth, meaning households and firms do not expect wages and price to increase. Another reason could be the productivity-targeted measures and more women entering the workforce. These measures mute inflation.

Source: CNBC, 14 June 2018 and The Telegraph 31 July 2018

### **Extract 10: Japan must proceed with unpopular sales tax hike**

Japan must proceed with a sales tax hike scheduled for 2019 to put its fiscal house in order and cover the rising social welfare costs of a rapidly aging society. The consumption tax is similar to the value-added tax or goods and services tax implemented in other countries.

The remark by Fumio Kishida, who oversees the Liberal Democratic Party's policy-setting, comes amid lingering calls from politicians to postpone for a third time the unpopular sales tax increase to 10 percent from 8 percent. Japan's government has twice delayed a plan to raise the sales tax to 10 percent from 8 percent, after an earlier hike from 5 percent hurt growth.

"It's an imminent task" for Japan to make its social welfare system more sustainable and improve its fiscal health, Kishida told reporters. "Japan must ensure it proceeds steadily with the scheduled sales tax hike so it can meet the government's goal of balancing the budget in the fiscal year ending in March 2021, he said. Japan's public debt is at twice the size of its economy, and is the biggest among advanced economies.

Source: Reuters, 5 September 2017



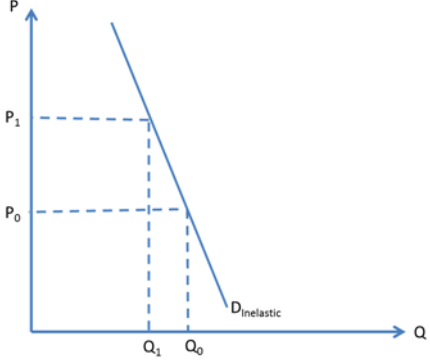
**Questions**

- (a) Describe the trend in India's budget position from 2013 to 2017. [2]
- (b) Explain how higher growth rates in India would affect its budget position. [2]
- (c) Explain the factors that would allow India to achieve sustainable growth in 2018. [4]
- (d) (i) Identify the relationship between Japan's GDP and general price level from 2013 and 2017 shown in Table 3. [1]
- (ii) With help of a diagram, account for the above relationship despite "the productivity targeted measures and more women entering the workforce" mentioned in Extract 9. [6]
- (e) Japan and India have adopted different monetary policy approaches.
- (i) Explain one possible reason why Japan is fearful of deflation. [2]
- (ii) Explain how India's monetary policy can help to ease its inflation problem and comment on the suitability of her approach. [7]
- (f) Discuss whether Japan should proceed with the imposition of the sales tax hike. [8]
- (g) In light of the macroeconomic problems that India is facing, assess the possible effects of a depreciation of its currency on its macroeconomic performance. [12]

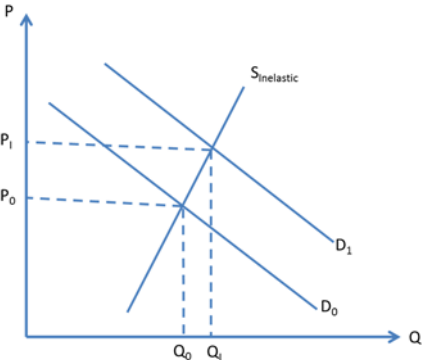
**[Total: 45 marks]****- End of Paper -****[Turn over**

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## EYE H1 Micro CS Suggested Answers

(a) (i)	Define price elasticity of demand.	[1]
<p><i>Price elasticity of demand (PED) is a measure to show the responsiveness, of the quantity demanded of a good or service to a change in its price, ceteris paribus. [1] PED gives the percentage change in quantity demanded in response to a one percent change in price.</i></p> <p><u>Markers' Comment</u></p>		
(ii)	What can you conclude from the evidence in Extract 1 about the likely value of the price elasticity of demand of gambling?	[2]
<p><i>Extract 1 suggests that gambling is highly addictive and successful advertising reinforces such behaviour. [1] Therefore, the demand should be highly inelastic and <math> PED  &lt; 1</math>. [1]</i></p> <p><u>Markers' Comment</u></p>		
(iii)	With reference to Extract 2 and the aid of a diagram, explain how the increase in betting charges accounts for the change in the UK's household expenditure on gambling.	[4]
<p><i>It is already established that PED is highly inelastic (from a(ii)). Extract 2 concludes that "the amount spent on gambling has been rising rapidly", "even as the betting charges (prices) are rising." Given the elasticity we expect a less than proportionate fall in quantity demanded when prices rise. [1] In these circumstances, the household expenditure / total revenue of the firms (<math>P \times Q</math>) will increase. [1]</i></p> <p><i>Diagram and reference to diagram (see below). [2]</i></p>  <p><i>With reference to the diagram above, the increase in betting charges from <math>P_0</math> to <math>P_1</math> caused a less than proportionate decrease in quantity demanded from <math>Q_0</math> to <math>Q_1</math>. This caused the total expenditure on betting to increase from <math>P_0 \times Q_0</math> to <math>P_1 \times Q_1</math>.</i></p> <p><u>Markers' Comment</u></p>		

(b)	Compare the trends between the non-remote and remote gambling revenues in the UK from April 2011 to March 2017.	[2]
<p><i>Comparing general trend: Both trends increased. [1]</i></p> <p><i>Comparing other aspects: Remote gambling increased at a faster rate <b>or</b> non-remote gambling was always higher. [1]</i></p> <p><u>Markers' Comment</u></p>		
(c)	With reference to Extracts 2 and 3, account for the growth of the gambling industry in the UK and comment whether the change in supply is likely to be more important than the change in demand in explaining the growth.	[7]
<p><i>Explain [4m]</i></p> <p><b>DD factor</b> - <math>\uparrow</math> in no. of consumers <math>\rightarrow</math> more people are text-savvy and comfortable going online <math>\rightarrow</math> DD increases <math>\rightarrow</math> DD shifts right; <b>or</b> change in taste &amp; preferences due to successful advertising <math>\rightarrow</math> DD increases <math>\rightarrow</math> DD shifts right.</p> <p><b>SS factor</b> - more betting machines, casinos, use of technology to develop mobile gaming apps to allow online access <math>\rightarrow</math> SS increases <math>\rightarrow</math> SS shifts right.</p> <p><i>[2 marks for each DD &amp; SS factor]</i></p> <p><b>Comment [3m]:</b></p> <p><i>Students should make a judgement on whether demand or supply shifts more. While both demand and supply have been rising, from the extracts we may conclude that the demand factor may be stronger due to the highly addictive nature of gambling and the aggressive advertising expenditure committed by the industry.</i></p> <p><i>On the other hand, extract 2 suggests that there may be limits to growth as the remote segment becomes saturated. Also, gambling remains a regulated industry. These could have a limiting effect on supply. Take a stand.</i></p> <p><u>Markers' Comment</u></p>		

(d)	Using the concept of price elasticity of supply and a diagram, explain how the economic recovery in Las Vegas caused housing prices to grow “by double digits.”	[5]
<p>An economic recovery in Las Vegas would suggest that income levels in that area is likely to increase due to greater economic activity. Given rising income, demand for normal goods such as housing will increase, shifting demand to the right. <b>[1]</b></p> <p>Extract 5 also provides evidence that “the number of housing units available for sale has fallen 30% over the past year.” This suggests quite clearly that the price elasticity of supply is highly inelastic (<math> PES  &lt; 1</math>) due to low stocks. <b>[1]</b></p> <p>With demand shifting to the right, because of the price inelastic supply, the increase in price is likely to be large (“double digits”). <b>[1]</b></p> <p>Diagram and reference to diagram (see below). <b>[2]</b></p>  <p>With reference to the diagram above, the increase in demand for housing caused a large increase in the price of housing from <math>P_0</math> to <math>P_1</math>.</p> <p><u>Markers' Comment</u></p>		
(e)	Discuss the extent to which the gambling industry has improved the standards of living in Las Vegas.	[8]
<p><u>Introduction: Define and explain standards of living (SOL), and the background of Las Vegas.</u></p> <p>SOL measures the quality of life in a country. Both quantitative (material) as well as qualitative (non-material) aspects need to be considered in order to draw a conclusion. Material SOL includes the ability of consumers to consume goods and services while non-material SOL includes other intangible aspects. Indicators of SOL include real GDP per capita (for material SOL), and health, education and environmental indicators (for non-material SOL).</p>		

*Las Vegas, a city in the US state of Nevada has an economy that is centred on gambling and its revival has nothing to do with deregulation unlike the UK. The general and gradual recovery of the US economy since the Financial Crisis may be the trigger that contributes to Vegas' growth. The improved condition of the national economy has given a boost to the many States including Nevada and Washington. Greater economic opportunities and warmer weather may be attracting more people into cities like Las Vegas and Seattle giving many of its industries including gambling a lift.*

**Thesis: The gambling industry has improved the standards of living in Las Vegas.**

*As gambling is a dominant industry in the city it would have contributed significantly to the Las Vegas's growth. For example, the building of casinos ("Resorts World Las Vegas", "big casinos are starting to rumble and make land acquisitions") is a form of investment that increases AD, which then causes an increase in NY. This contributes towards improving SOL by increasing the real GDP per capita. The increase in AD also creates jobs in industries such as construction, healthcare, hospitality and transportation as these are mentioned in extract 5. We can conclude that as a result of unemployment being lowered by 9% over the years the material welfare of many Vegas residents has increased.*

*The gambling industry has also attracted new arrivals – retirees who are "a key gaming demographic". These retirees could also be the catalyst that contributes to the material welfare in Vegas. The consumption of gambling by these new arrivals also contributes to consumption and adds to the increase in AD, further increasing NY and boosting material SOL.*

**Anti-thesis: The gambling industry has not improved the standards of living in Las Vegas.**

*However, the Vegas revival may only be partially attributed to the gambling as sectors such as housing, health and transportation are positively contributing ("tourism, healthcare, ... continued to add employees to the payroll").*

*Furthermore, while material welfare may have been raised it is very unlikely that non-material welfare would have gone up. This is due to the fact that gambling is an activity associated with market failure. Gambling generates negative externalities due to external costs thereby driving up social costs. Problem triggers associated with this industry such as organised crimes, petty crimes and domestic violence will likely rise. The information failure associated with gambling being a demerit may contribute negatively to individual welfare causing them to underestimate true costs. Health costs and counselling costs may deprive gamblers and their family's material and non-material benefits. An additional concern could be the retirees who love to gamble. If gambling consumes them instead of keeping them amused and occupied they could become an additional burden to society. In total, non-material welfare of the Las Vegas residents may suffer and impact SOL negatively.*

**Evaluation:**

*In conclusion, gambling likely improved the material SOL of Las Vegas and but worsen the non-material SOL. However, it should be noted that we do not have sufficient information to be conclusive about the rise in material welfare. We do not have comprehensive GDP figures nor other useful information such as inflation data. We also do not have sufficient statistics to be conclusive about the fall in non-material living standards in Las Vegas due to the gambling industry. No information about crime rates and other social costs are presented. Therefore, more information would need to be collected and analysed before determining whether the improvement in material SOL outweighs the worsening of the non-material SOL.*

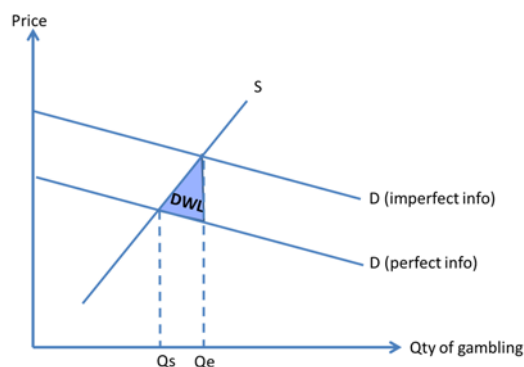
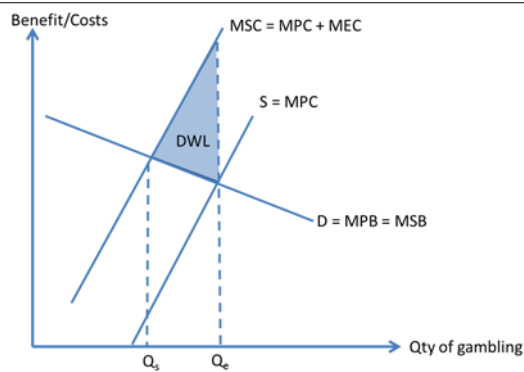
**Marks scheme**

Level	Descriptor	Marks
L2	A thorough answer that examines both side of the argument and presents evidence from the case material. Both material and non-material aspects of standards of living are considered while the discussion focusses on Las Vegas.	4-6
L1	An incomplete or one-sided presentation. Lacking reference to case material.	1-3
E2	Substantiated judgement that highlights the difficulty in offering clear conclusions.	2
E1	Superficial evaluation and unsubstantiated judgement.	1

**Markers' Comment**

(f) (i)	<b>Explain what is meant by negative externalities.</b>	<b>[2]</b>
<p><i>Explain negative impacts on unrelated third party due to consumption or production of a good or service. These translate to marginal external costs (MEC) which creates a divergence between private and social costs. [1] Illustrate with an example from the extracts. [1]</i></p> <p><u>Markers' Comment</u></p> <p>Majority of the students ignored the mark allocation and therefore did not give example to illustrate negative externalities. While most of the students were able to define the term correct, there were a few who gave incomplete or imprecise definition and others ended up explaining demerit goods.</p>		
(ii)	<b>Explain why gamblers have underestimated their private cost.</b>	<b>[2]</b>
<p><i>The perceived costs of an economic activity are much lesser than the actual costs realised due to either a lack of information or misunderstanding the consequences of their actions. [1] Illustrate with an example from the extracts. [1]</i></p> <p><u>Markers' Comment</u></p> <p>Many of the students have misconception that the imperfect information happens as the consumers or producers lack information on the external cost. Though they were not penalised for this, i.e. one mark has given if they mention that gamblers have imperfect information, they had difficulties providing an illustration. Students must recognise that imperfect information happens when the consumers or producers lack information on the hidden cost, i.e. long-term cost or unintended cost.</p>		
(iii)	<b>With reference to the UK as well as Singapore, assess whether the actions of the two governments have corrected or worsened market failure in gambling in the two countries.</b>	<b>[12]</b>
<p><u>Introduction: Explain how gambling causes market failure due to negative externalities and imperfect information</u></p> <p><i>Define and explain fully the concept of market failure. Identify the sources of market failure in the context of gambling. Students should illustrate the case of negative externality in consumption as well as gambling being a demerit good. Third party costs should be explained and illustrated with examples. Information failure resulting in overestimating the benefits and underestimating costs should be examined. The resulting failure of the market to predict the correct equilibrium and the consequence of this failure in terms of overconsumption of gambling as a good as well as the dead weight loss incurred by society should be elaborated. Diagram. Suggest briefly, some possible policy prescriptions. Taxes, regulation, education etc.</i></p>		





#### Identify the actions taken by the two governments

The UK pursued deregulation allowing freer access of the market to firms providing gambling services. More facilities and easier convenient were the outcomes. Besides, the firms were able to manipulate and mould consumer behaviour through advertising.

Singapore, on the other hand, made use of regulation as well as education in its attempt to correct possible problems. Taxes were imposed on residents while counselling was made available through both government and private channels to help would-be addicts.

#### Thesis: Government actions corrected market failure

The action of the Singapore government helped to correct the market failure present (extract 4). The \$100 daily entrance levy imposed on all Singaporeans has helped locals internalise the external costs of consuming gambling and has become a successful deterrent. As the novelty of casinos wears off, the number of locals entering the casinos has tapered off, thus effectively reducing the consumption of this service.

The counselling and education offered to gamblers have "raised greater awareness" and has "brought the addiction rates down." Thus, the information failure that is inherent in gambling has been corrected to a certain extent. The over-consumption has been reduced allowing the market to consume closer to the socially acceptable equilibrium with significant reduction in the dead weight loss.

#### Evaluation of Sg government's intervention

However, Sg government's actions may not have corrected market failure. It should be noted that the \$100 daily entrance levy may be an ineffective deterrent especially to the above average income earners and high-rollers. Low income gamblers who find the levy costly may still resort to illegal gambling or go "overseas" (Malaysia or hitting international waters on board cruise ships) to gamble. Also, the fact that we still have about 28000 hard-core gamblers in Singapore is a concern and questions the effectiveness of the policies.

Anti-thesis: Government actions worsened market failure

It can be argued that the action of the UK in deregulating the gambling industry would have worsened the market failure (extract 2 & 3). As a result of greater and easier access to gambling, more people in the UK are into gambling, as evidenced by higher expenditure by British households. This is happening despite the increase in betting charges. The blatant advertising and moulding of consumer behaviour as shown in extract 3 worsens the market failure as hard-core addiction will most likely rise. The use of technology to make gambling more "convenient" also suggests that market failure will worsen in the UK. Overall,  $Q_e > Q_s$ , and there is still over-consumption and over-production leading to higher social costs and dead weight loss to society.

Evaluation of UK government's intervention:

However, it is possible that the UK government's actions did not worsen the market failure. For the UK, the case study material does not provide any statistics about hard-core addiction, social costs, crime rates etc. making judgement difficult. The fact that the Daily Mail "is highly critical" of some of the gambling industry's action does raise concern that problems may exist.

Conclusion: Judgement as to who has better control over gambling. Suggestion of further actions needed by the different governments to consolidate.

Marks scheme

Level	Descriptor	Marks
L3	A thorough answer that assesses the actions of both governments and presents evidence from the case material.	6-9
L2	An incomplete or one-sided presentation. Lacking reference to case material and / or ignoring one of the countries.	3-5
L1	Largely incomplete, irrelevant and incorrect explanations besides lacking reference to case materials.	1-2
E2	Supported judgment based on reasonable argument or evidence.	2-3
E1	Superficial evaluation and unsubstantiated judgement.	1

### Markers' Comment

Apparently, many students did not have enough time to complete this question.

This question has quite poorly attempted with almost all ended up at L2 with minimal evaluation marks given.

Majority of the students did not explain why the market failure occurs in the first place. As such, these students have weak explanation on how the market has been corrected or worsened.

For those who managed to how the market failed, many only had one-sided answer where they only discussed about either tax or education would work to correct the market. Many did not identify the action taken by the UK government which is deregulation.

For those who presented two-sided answer which correctly identify the respective actions by the SG and UK government, many lacked use of economic concepts to analyse how the policies work, deterring them from reaching the L3 score.

## Question 2: Economic Challenges in India and Japan Suggested Answers

### (a) Describe the trend in India's budget position from 2013 to 2017.

India's budget position is in deficit [1] from 2013 to 2017. India's budget deficit has been **worsening** [1] from 2013 to 2017.

### (b) Explain how higher growth rates in India would affect its budget position. [2]

Higher growth rates in India means that national income increases. This means that there is an increase in personal income tax collected. In addition, higher growth rates mean that profits earned are higher, resulting in an increase in corporate tax collected. Since budget position =  $T - G$ , an increase in  $T$  would improve the budget position.

**OR**

Higher growth rates in India means that national income increases. The increase in production of goods and services means more factors of production including labour are employed. The fall in unemployment means that the government has to pay out lesser unemployment benefits. Since budget position =  $T - G$ , a decrease in  $G$  would improve the budget position.

*1m – explain how  $T$  increases or  $G$  falls*

*1m – state that India's budget position will improve*

### (c) Explain the factors that would allow India to achieve sustainable growth in 2018. [4]

#### Actual growth [2]

Extract 6 “high optimism in domestic demand” means that domestic demand is projected to increase. Hence, firms are willing to invest. This causes investment to increase. Since  $AD = C + I + G + (X-M)$ ,  $AD$  increases, which results in actual growth.

**OR**

Extract 6 “India's jump on World Bank's Ease of Doing Business Index” improves business confidence in India. This causes investment to increase which increases  $AD$  since  $AD = C + I + G + (X-M)$ . This results in actual growth.

**OR**

Extract 6 “government allocated a massive amount to infrastructure”. Higher government expenditure in 2018 causes  $AD$  to increase, since  $AD = C + I + G + (X-M)$ . This results in actual growth.

**OR**

Extract 6 “more than 75% of the world economy is enjoying an upswing”. Increase in worldwide income means that worldwide purchasing power has increased. Thus, consumers worldwide will consume more goods and services, including imports. Thus, demand for India's exports will increase. Since  $AD = C + I + G + (X-M)$ ,  $AD$  increases and resulting in actual growth.

#### Potential growth [2]

Increase in investment/increase in government expenditure on infrastructure causes the quantity of capital to increase. This increases productive capacity, causing LRAS to increase, resulting in potential growth.

**(d)(i) Identify the relationship between Japan's GDP and general price level from 2013 to 2017 shown in Table 3. [1]**

- Real GDP growth rates are all positive → GDP increasing
- Inflation rates all positive (except for 2016) → generally GPL increase
- Direct/positive relationship between Japan's GDP and GPL from 2013 to 2017. [1]

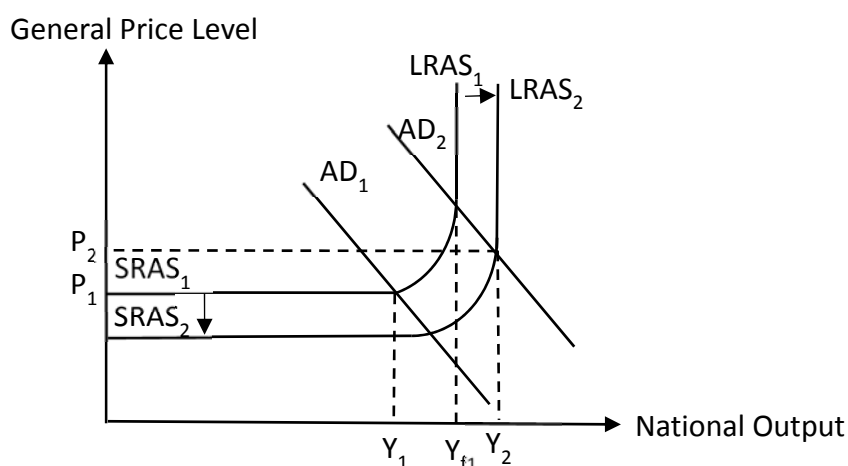
**(d)(ii) With help of a diagram, account for the above relationship despite “the productivity targeted measures and more women entering the workforce” mentioned in Extract 9. [6]**

Productivity targeted measures results in lower unit cost of production. In addition, more women entering the workforce increases the supply of labour, resulting in a fall in wages. This also reduces unit cost of production. As a result, SRAS increases and shift downwards from SRAS<sub>1</sub> to SRAS<sub>2</sub>.

Higher productivity and greater number of labour increases Japan's productive capacity. This causes LRAS to shift rightwards from LRAS<sub>1</sub> to LRAS<sub>2</sub>.

The increase in SRAS and LRAS would cause GPL to fall and national output to increase.

However, the fiscal stimulus put in place means there is higher government spending. This increases AD, resulting in a rightward shift of AD from AD<sub>1</sub> to AD<sub>2</sub>.



Since the increase in AD outweighs the increase in AS, GPL increases from P<sub>1</sub> to P<sub>2</sub> and national output increases from Y<sub>1</sub> to Y<sub>2</sub>. This accounts for the above relationship.

*3m – explain SRAS and LRAS increase (either max 2m)*

*1m – explain AD increase*

*1m – diagram*

*1m – recognise that AD increase have to outweigh the increase in AS for GPL and national output to increase. Increase in AD > AS has to be shown in diagram.*

**(e) Japan and India have adopted different monetary policy approaches.**

**(e)(i) Explain one possible reason why Japan is fearful of deflation. [2]**

Deflation means that prices are falling. If consumers expect prices to fall, they will postpone consumption, leading to a fall in AD and a fall in actual growth which will worsen material standard of living.

*Accept deflation worsens business confidence which worsens growth*

*1m if answer did not link to macro goal or SOL*

**(e)(ii) Explain how India's monetary policy can help to ease its inflation problem and comment on the suitability of her approach. [7]**

Explain how India's monetary policy works [4]

India has adopted a contractionary monetary policy by increasing interest rates [1]. An increase in interest rate increases cost of borrowing. This causes a fall in demand for big ticket items, resulting in a fall in C [1]. In addition, the profitability of investment falls, causing a fall in I [1]. Since  $AD = C + I + G + (X - M)$ , AD falls, resulting in a fall in demand pull inflation which eases inflationary pressures. [1 – fall in demand pull inflation/GPL]

Comment on suitability of approach [3]

*Root cause of inflation*

India's monetary policy may not be appropriate. India is experiencing inflation due to rising oil prices. As India imports oil and oil is a factor of production, this increases the unit cost of production, causing a fall in SRAS which results in cost push inflation. The contractionary monetary policy aims to correct demand pull inflation, which does not target the root cause of the inflation.

*OR Conflict with other macroeconomic growth*

Even though India's monetary policy helps to ease inflationary pressures, it might conflict with other macroeconomic goals. A fall in AD means that national output falls. Since firms produce lesser goods and services, lesser factors of production including labour would be employed. This increases demand-deficient unemployment which worsens India's unemployment crisis as mentioned in Extract 7.

**(f) Discuss whether Japan should proceed with the imposition of the sales tax hike. [9]**

Introduction

Whether Japan should proceed with the imposition of the sales tax hike depends on whether the sales tax hike generate a net benefit or net cost.

Thesis: Japan should proceed i.e. benefits of sales tax hike

Extract 10 "public debt is twice the size of its economy". The sales tax allows Japan to earn higher tax revenue. This helps to reduce its debt burden and helps to improve its budget position. This would improve business confidence, attracting I which causes AD to increase,

allowing Japan to attain actual growth. This higher quantity of capital also allows Japan to attain higher potential growth.

The higher tax revenue collected allows Japan to spend on “social welfare costs” associated with a rapidly aging society. For example, government can spend more on healthcare or build more elderly friendly infrastructure. This improves the quality of life and hence, non-material standard of living of the elderly.

Anti-thesis: Japan should not proceed i.e. costs of sales tax hike

Sales tax would increase firms’ cost of production. This causes SRAS to fall, which will worsen actual growth. In addition, the higher cost of production will lead to cost push inflation.

The lower growth would cause national income to fall. The fall in purchasing power means that Japanese citizens consume lesser goods and services. This causes a fall in material standard of living.

The higher prices of goods and services would worsen inequity. As sales tax is a regressive tax, the higher prices of goods and services would take up a larger proportion of the income for the lower income households. As a result, the lower income households would consume lesser goods and services, worsening their material standard of living.

Evaluation: overall net benefits or net cost

In the short run, Japan would incur the cost of lower actual growth. However, the long run benefit of an improved fiscal position will outweigh the short term cost. Thus, Japan should proceed with the sales tax hike while adopting complementary policies to alleviate the negative effects in the short run. For example, targeted subsidies can be provided to low income households for necessities to minimise the worsening of the SOL.

Level	Descriptor	Marks
L2	Well-developed explanation of the benefits <b>and</b> costs of proceeding with imposition of sales tax hike.	4 – 6
L1	Under-developed explanation of the benefits and costs of proceeding with imposition of sales tax hike. <b>OR</b> Well-developed explanation of the benefits <b>or</b> costs of proceeding with imposition of sales tax hike.	1 – 3
E	Supported judgement based on reasonable argument or evidence. Evaluation should focus on whether Japan should proceed with the imposition of a sales tax hike.	1 – 3

**(g) In light of the macroeconomic problems that India is facing, assess the possible effects of a depreciation of its currency on its macroeconomic performance. [12]**

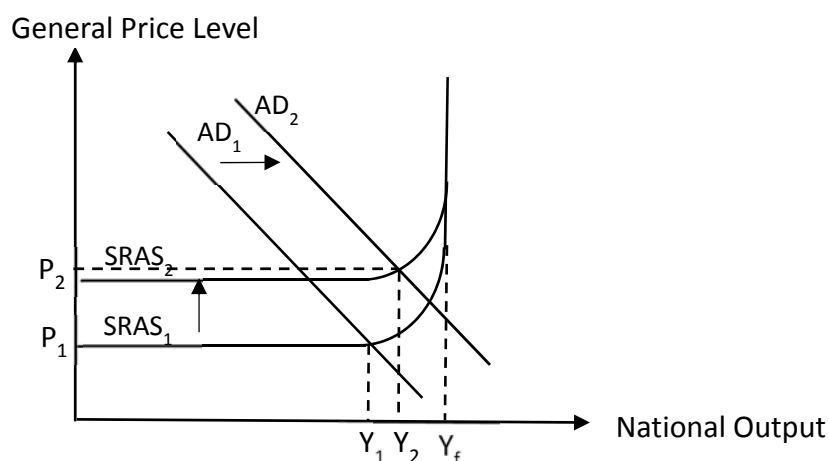
Introduction

Depreciation occurs when the external value of the currency falls. India is facing macroeconomic problems of high unemployment (Extract 7 “India’s economic growth has been largely jobless”) and inflation (Extract 8).

### Explain how depreciation works

Price of exports in foreign currency falls while price of imports in domestic currency increases. Quantity demanded for exports by foreigners increases while quantity demanded of imports by locals fall as locals switch to the cheaper domestically produced goods and services. Thus,  $(X-M)$  increases, causing AD to increase and shift rightwards from  $AD_1$  to  $AD_2$ .

However, the higher prices of imports mean that the price of imported raw materials increases. This increases the unit cost of production, causing SRAS to fall. SRAS shift upwards from  $SRAS_1$  to  $SRAS_2$ .



### Positive effects of depreciation on India's macroeconomic performance

Depreciation would positively impact India's macroeconomic performance.

Assuming increase AD is greater than the fall in SRAS, national output increases from  $Y_1$  to  $Y_2$ . This results in actual growth.

In addition, the increase in production of goods and services means firms need to employ more factors of production including labour. This reduces demand-deficient unemployment in India.

### Negative effects of depreciation on India's macroeconomic performance

However, depreciation also has negative effects on India's macroeconomic performance.

Depreciation causes both demand pull and cost push inflation. GPL increases from  $P_0$  to  $P_1$ , which worsens India's inflation problem. Given that India is an oil importing country, depreciation of India currency would cause price of imported oil to rise further, worsening cost push inflation in India.

In addition, depreciation might not help India lower its unemployment rate. From extract 6, India is less dependent on global flows of trade. This means that  $(X-M)$  would increase to a small extent. Hence, a small number of jobs are created, which is insufficient for India's huge economy. Extract 7 states that "Indian GDP needs to grow at 10% to produce enough jobs".

Depreciation does not help to address structural unemployment that India is facing. From extract 7 "Traditional jobs have disappeared and are not coming back ... new skills requirements will further challenge its youth". Even though more jobs are created, if Indian citizens are not equipped with the skills that these new job requires, structural unemployment



will still persist. Thus, depreciation does not help to correct structural unemployment as it does not address the mismatch of skills.

Depreciation would also worsen the income inequality issue in India. The higher national income earned would go to the rich, which increases the material SOL for the rich to a large extent and not the poor. This worsens income inequality which worsens inequity.

Evaluation: Does depreciation worsen or improves India's macroeconomic performance

Overall, depreciation has a greater negative impact on India's macroeconomic performance.

The current economic situation in India is that India is achieving sustainable growth while facing the problems of high unemployment and inflation. Even though depreciation helps India achieve further actual growth, it will worsen inflationary pressures in India. Higher inflationary pressures would deter investments as it is difficult for firms to project their expected revenue and cost from investing. This would worsen India's growth in the long run.

In addition, the jobs created might not address the high unemployment in India as it only corrects demand deficient unemployment, not structural unemployment.

Overall, depreciation would worsen India's macroeconomic performance. This causes standard of living in India to worsen, especially for the poor.

Level	Descriptor	Marks
L3	Well-developed explanations of both the positive <b>and</b> negative effects of a depreciation of India's currency on its macroeconomic performance. Answer should <b>consider</b> the macroeconomic problems that India is facing.  No reference to the case: max 6m	6 – 9
L2	Under-developed explanations of both the positive <b>and</b> negative effects of a depreciation of India's currency on its macroeconomic performance. Answer <b>did not consider</b> the macroeconomic problems that India is facing. <b>OR</b> Well-developed answer on both the positive <b>or</b> negative effects of a depreciation of India's currency on its macroeconomic performance. Answer should <b>consider</b> the macroeconomic problems that India is facing.	3 – 5
L1	Answer is mostly irrelevant. Only a few valid points. Lacks economic reasoning.	1 – 2
E2	Supported judgment based on reasonable argument or evidence. Evaluation should focus on whether depreciation of currency has a net positive or negative effect on India's macroeconomic performance.	2 – 3
E1	Unsupported judgement.	1