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.

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

1. (i) Define price elasticity of demand. [1]
   1. What can you conclude from the evidence in Extract 1 about the likely value of price elasticity of demand for gambling? [2]
   2. 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]
2. Compare the trends between the non-remote and remote gambling revenues in the UK from April 2011 to March 2017. [2]
3. 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]
4. 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]

# [Total: 45 marks]

# EYE H1 Micro CS Suggested Answers

**(a) (i), Define price elasticity of demand., [1]**

*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.*

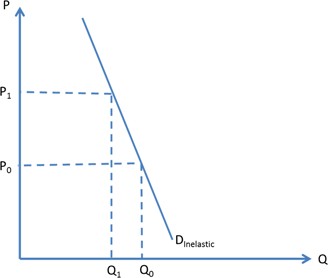
**(ii), What can you conclude from the evidence in Extract 1 about the likely value of the price elasticity of demand of gambling?, [2]**

*Extract 1 suggests that gambling is highly addictive and successful advertising reinforces such behaviour.* ***[1]*** *Therefore, the demand should be highly inelastic and |PED| < 1.* ***[1]***

**(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]**

*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 (P X Q) will increase.* ***[1]***

*Diagram and reference to diagram (see below).* ***[2]***



*With reference to the diagram above, the increase in betting charges from P0 to P1 caused a less than proportionate decrease in quantity demanded from Q0 to Q1. This caused the total expenditure on betting to increase from P0 X Q0 to P1 X Q1.*

**(b), Compare the trends between the non-remote and remote gambling revenues in the UK from April 2011 to March 2017., [2]**

*Comparing general trend: Both trends increased.* ***[1]***

*Comparing other aspects: Remote gambling increased at a faster rate* ***or*** *non-remote gambling was always higher.* ***[1]***

Markers’ Comment

**(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]**

*Explain* ***[4m]***

***DD factor*** *- ↑ in no. of consumers → more people are text-savvy and comfortable going online → DD increases → DD shifts right;* ***or*** *change in taste & preferences due to successful advertising → DD increases → DD shifts right.*

***SS factor*** *- more betting machines, casinos, use of technology to develop mobile gaming apps to allow online access → SS increases → SS shifts right.*

*[****2*** *marks for each DD & SS factor]*

*Comment* ***[3m]****:*

*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.*

*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.*

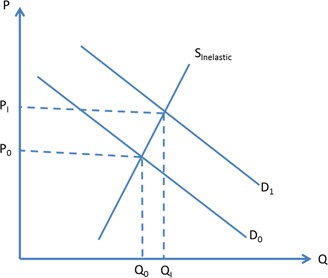
**(d), Using the concept of price elasticity of supply and a diagram, explain how the economic recovery in Las Vegas caused housing prices to grow “by double digits.”, [5]**

*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.* ***[1]***

*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 (|PES| < 1) due to low stocks.* ***[1]***

*With demand shifting to the right, because of the price inelastic supply, the increase in price is likely to be large (“double digits”).* ***[1]***

*Diagram and reference to diagram (see below).* ***[2]***



*With reference to the diagram above, the increase in demand for housing caused a large increase in the price of housing from P0 to P1.*