

12. The following table shows the total expenditure of Mary and Peter on soft drinks.

Unit price (\$)	Consumer's total expenditure (\$)	
	Mary	Peter
1	20	60
2	40	60
3	60	60
4	80	60

Mary's elasticity of demand for soft drinks is _____ while Peter's elasticity of demand for soft drinks is _____ (without regard to the negative sign).

- A. between zero and one equal to zero
- B. between zero and one equal to one
- C. equal to zero equal to zero
- D. equal to zero equal to one

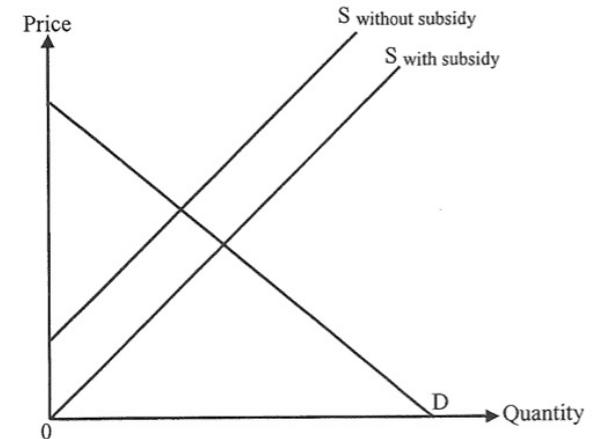
20. The following table shows the marginal benefit schedule of a consumer for avocados.

Quantity (units)	1	2	3	4	5	6
Marginal benefit (\$)	8	7	6	5	4	3

When the price of avocados increases from \$5 to \$6, the consumer surplus will _____.

- A. increase by \$1
- B. increase by \$3
- C. decrease by \$1
- D. decrease by \$3

21. Refer to the following supply-demand diagram of Good X.



If the government cancels the per-unit subsidy on Good X, it will lead to a decrease in _____.

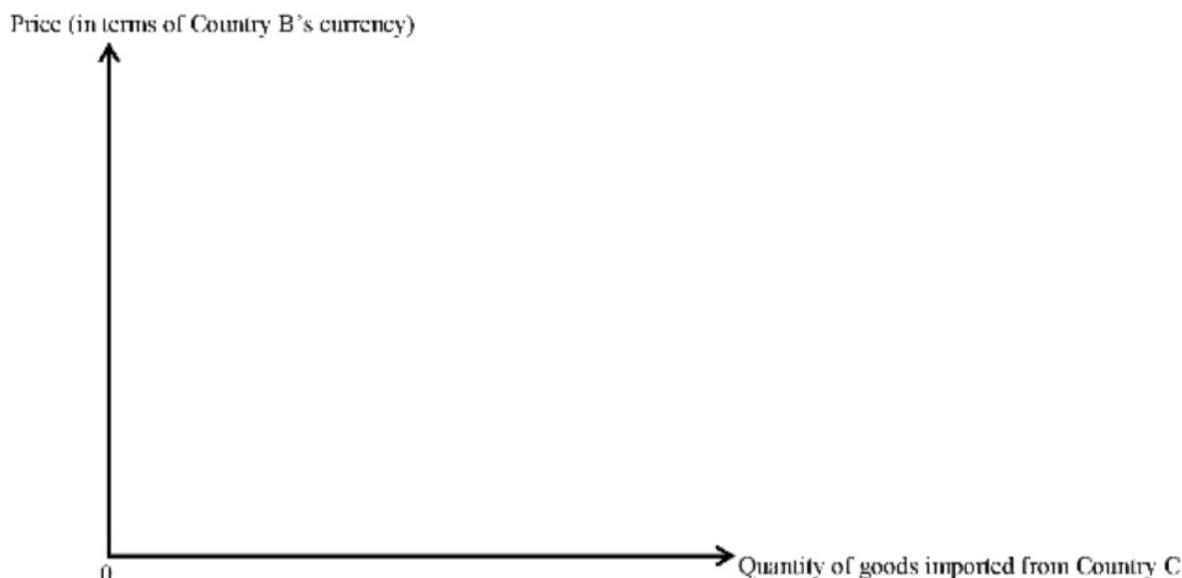
- (1) quantity transacted
 - (2) consumer surplus
 - (3) deadweight loss
- A. (1) and (2) only
 - B. (1) and (3) only
 - C. (2) and (3) only
 - D. (1), (2) and (3)

2. There are two kinds of food deliverers: 'riders' delivering food by self-provided motorbikes and 'walkers' delivering food on foot. Why do 'riders' usually have a higher income per order than 'walkers'? Suggest **ONE** demand-side factor and **ONE** supply-side factor to explain your answer. (4 marks)

4. Country B and Country C are two large open economies. Facing a huge visible trade deficit, Country B imposes a per-unit tariff on goods imported from Country C. Suppose Country B's demand for goods imported from Country C is elastic.

- (a) With the aid of Figure 1, explain how the tariff would affect the total expenditure of Country B on goods imported from Country C. (6 marks)
- (b) "Devaluation of a country's currency against its trading partners' may have the same effect on imports as tariff." Use Country B as an example to justify this statement. (2 marks)
- (c) Apart from the effect on the country's visible trade balance, explain **ONE** other effect of devaluation on its balance of payments. (2 marks)

Figure 1: Goods imported from Country C by Country B



10. The Olympic Games attract billions of international television viewers to watch the competitions among thousands of top athletes.
- (a) Some restaurants in shopping malls find their businesses increase sharply when the malls broadcast Olympic events. Explain how the broadcast of Olympic events may result in a divergence between private and social benefits. (3 marks)
- (b) Suppose the divergence in part (a) does exist. How can market mechanism help reduce this divergence? (2 marks)

Athletes compete in the Olympic Games with their support teams consisting of sport psychologists, physical therapists, nutritionists, etc.

- (c) Which economic principle is illustrated in the above practice? State **TWO** reasons why such a practice can increase labour productivity. (3 marks)

Some professional athletes receive a monthly salary and share a proportion of the prize money whenever they win in competitions.

- (d) Instead of paying the athletes a monthly rate only, explain why some employers of professional athletes use the above wage payment arrangement. (2 marks)

Whenever an athlete wins a gold medal in a certain sport, there will be the following phenomena: more people will start learning the sport. As a result, there will soon be long queues registering for courses in the sport.

- (e) With the aid of a demand-supply diagram, explain the above phenomena. (5 marks)

Professional athletes usually start their full-time training before graduating from secondary school and have to give up their studies.

- (f) Will the opportunity cost of being a professional athlete be affected if the average income of professional athletes increases? Explain. (2 marks)

SECTION 7: DEMAND AND SUPPLY (II)

7.1 ELASTICITIES OF DEMAND & SUPPLY

Multiple Choice Questions

1990/CE/II/05

Suppose there is a good harvest of apples this year. Under which of the following conditions will apple growers earn more income?

- A. They sell more apples.
- B. The demand for apples is elastic.
- C. The supply of apples is inelastic.
- D. The government fixes a minimum price on apples.

1990/CE/II/26

After the launching of an advertising campaign, both the price and the quantity sold of a product increase. Which of the following statements can explain this?

- A. The demand for the product is inelastic.
- B. The supply of the product is elastic.
- C. The demand for the product increases.
- D. The supply of the product decreases.

1991/CE/II/19

Price	Quantity Demanded (units)	Total Revenue
\$2	10	\$20
\$4	6	\$24
\$6	4	\$24
\$8	3	\$24
\$10	1	\$10

The elasticity of demand is unitary over the price range from

- A. \$2 to \$6
- B. \$2 to \$8
- C. \$4 to \$8
- D. \$4 to \$10

1991/CE/II/23

When demand increase, which of the following would cause a greater rise in price?

- A. There is a large unsold stock of the good.
- B. It is easy to enter the industry.
- C. The factors of production have a low mobility.
- D. There is excess capacity in production.

1991/CE/II/57

Which of the following would **NOT** lead to an increase in the total revenue from the sale of a product?

- A. an increase in its demand
- B. an increase in its selling price
- C. a decrease in its demand
- D. a decrease in its selling price

1992/CE/II/28

Suppose the demand for wheat is elastic. Which of the following will decrease if there is a poor harvest of wheat?

- (1) the price of wheat
- (2) the total expenditure on wheat
- (3) the demand for wheat
- (4) the quantity of wheat transacted

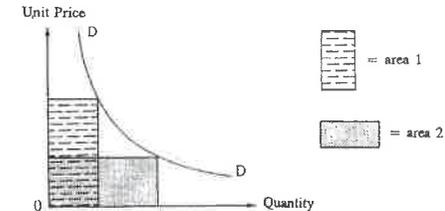
- A. (1) and (2) only
- B. (1) and (3) only
- C. (2) and (4) only
- D. (3) and (4) only

1993/CE/II/20

From 1990 to 1991, even though the price of private flats increased rapidly more flats were sold than in the previous year. Which of the following reasons can explain this?

- A. The demand for private flats did not obey the law of demand
- B. The demand for private flats was inelastic.
- C. There was an increase in the supply of public housing.
- D. There was a change in the demand for private flats.

1993/CE/II/25



If the demand is unitarily elastic along the above curve DD, then area 1 _____ area 2.

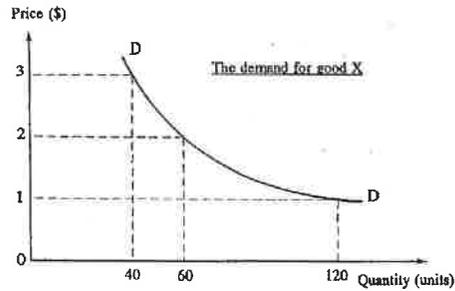
- A. is equal to
- B. is greater than
- C. is smaller than
- D. may be greater or smaller than

1993/CE/II/28

In a period of rainy weather, the price of umbrellas increased by 10% while the quantity transacted increased by 15%. What is the price elasticity of demand/supply of umbrellas in the above situation?

- A. The demand is elastic
- B. The demand is inelastic
- C. The supply is elastic
- D. The supply is inelastic

1995/CE/11/07



The demand for good X is

- A. elastic.
- B. unitary elastic.
- C. perfectly elastic.
- D. inelastic.

1996/CE/11/10

Research shows that changes in bus fares will not affect the number of passengers who travel before 9 a.m. but will affect the number of passengers who travel after 9 a.m. which changes by a greater percentage than the percentage change in bus fares. In order to obtain the largest revenue, the bus company should

- A. increase the fare before and after 9 a.m.
- B. not change the fares before 9 a.m. but reduce the fares after 9 a.m.
- C. increase the fares before 9 a.m. but reduce the fares after 9 a.m.
- D. not change the fares before 9 a.m. but increase the fares after 9 a.m.

1997/CE/11/08

If there is a poor harvest of rice in Thailand, the total expenditure on Thai rice in Hong Kong

- A. would increase because of a price rise.
- B. would decrease because of the availability of substitutes.
- C. would be more or less the same because of the availability of substitutes.
- D. may increase or decrease, depending on the price elasticity of demand of Thai rice.

1997/CE/11/09

The price elasticity of demand for the Hung Hom Cross-Harbour Tunnel service would decrease if

- A. the tunnel fee is raised from \$10 to \$30.
- B. the Western Harbour Crossing is open.
- C. the Eastern Harbour Crossing is closed for maintenance work.
- D. a new hydrofoil service is provided between Tsuen Wan and Wan Chai.

1997/CE/11/10

Support the MTR fares on short-distance journeys (X) and cross-harbour journeys (Y) are raised by 6.9% and 13.6% respectively. If the quantity demanded for X and Y falls by 8% and 3.5% respectively, which of the following is correct?

- A. Both the demand for X and Y are elastic.
- B. Both the demand for X and Y are inelastic.
- C. The demand for X is less elastic than the demand for Y.
- D. The demand for X is more elastic than the demand for Y.

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1998/CE/11/06

Suppose the unit price of good X increases from \$2 to \$2.8 and its quantity demanded changes by 20%. Which of the following statements is correct?

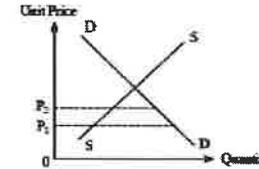
- A. The increase in price leads to more than proportionate decrease in the quantity demanded of good X.
- B. The increase in price leads to an increase in the total revenue of good X.
- C. The elasticity of demand for good X is 0.4.
- D. The change in the quantity demanded is less than the change in the price of good X.

1998/CE/11/07

When the supply of a commodity increases, its price may rise if

- A. The demand for it is perfectly inelastic.
- B. The demand for it is perfectly elastic.
- C. The price of its complement decreases.
- D. The price of its substitute decreases.

2000/CE/11/03



In the above diagram, when the price P_1 increases to P_2 ,

- A. the excess demand will disappear.
- B. the quantity transacted will decrease.
- C. the total revenue will necessarily increase.
- D. the total revenue will increase only if the demand is inelastic.

2000/CE/11/05

It became more difficult to find a metered car parking space by the roadside after the fee for a parking space was reduced from \$4 to \$2 for every 15 minutes. It was also reported that the fee in a car park remained at \$15 per hour.

Which of the following about the effect on metered car parking by the roadside is correct?

- A. It can be explained by the law of demand.
- B. It is an increase in demand.
- C. The equilibrium quantity decreases.
- D. The demand is elastic.

2000/CE/11/10

The demand elasticity of good X is 1.2. After a decrease in supply, the equilibrium quantity drops by 30%. The equilibrium price would _____ by _____.

- A. increase 25%
- B. decrease 25%
- C. increase 36%
- D. decrease 36%

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2002/CE/11/08

After a good harvest, the price of choi-sum has changed by 50% and the quantity transacted has changed by 40%. Which of the following statements is/are correct?

- (1) The quantity demanded of choi-sum has increased.
- (2) The demand for choi-sum has increased.
- (3) The total revenue from selling choi-sum has increased.

- A. (1) only
- B. (1) and (2) only
- C. (2) and (3) only
- D. (1), (2) and (3)

2002/CE/11/10

Suppose there is a technological advance in the production of a normal good. In which of the following situations may the market price of the good remain unchanged?

- A. The income of consumers decreases.
- B. The government raises the unit sales tax on the good.
- C. The demand for the good is perfectly inelastic.
- D. The supply of the good is perfectly inelastic.

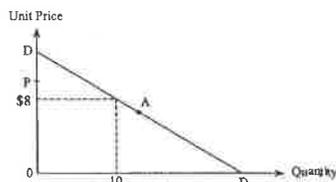
2003/CE/11/05

Which of the following would increase the elasticity of demand of the transport service of the Mass Transit Railway (MTR)?

- A. the cutting of bus lines running routes similar to those of the MTR
- B. a decrease in MTR passenger fares
- C. the opening of new lines of the Kowloon-Canton Railway running routes similar to those of the MTR
- D. a decrease in the operating costs of the MTR

2003/CE/11/07

Refer to the following straight line demand curve DD.



Point A is the mid-point of the demand curve DD. If the unit price increases from \$8 to P, the total revenue

- A. will be greater than \$80.
- B. will be equal to \$80.
- C. will be smaller than \$80.
- D. may be greater or smaller than \$80.

2003/CE/11/09

The government has imposed a fee for using the emergency services provided by public hospitals. As a result, patients' total expenditure on private medical services

- A. will decrease.
- B. will increase.
- C. will remain unchanged.
- D. may increase or decrease.

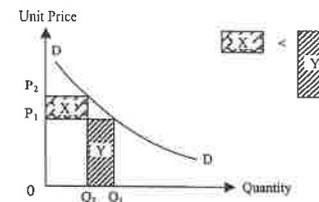
2003/CE/11/13

A market researcher reports to the manager of a company, "Even if we cut prices to boost sales, the sales revenue will remain unchanged because of the elasticity of demand of our product."

According to the market researcher, their product's elasticity of demand is

- A. perfectly inelastic.
- B. inelastic.
- C. elastic.
- D. unitarily elastic.

2004/CE/11/09



In the above diagram, DD is a demand curve. In the price range P_1 to P_2 , the elasticity of demand

- A. is less than 1.
- B. is equal to 1.
- C. is greater than 1.
- D. may be less than or greater than 1, depending on the exact values of P_1 , P_2 , Q_1 and Q_2 .

2005/CE/11/12

The table below shows the relationship between the price of Good X and its total sales revenue.

Price (\$)	1	2	3
Total sales revenue (\$)	100	200	300

Within the above price range, the elasticity of demand of Good X is

- A. equal to zero.
- B. greater than zero and smaller than one.
- C. equal to one.
- D. greater than one.

2006/CE/II/09

Fearing an outbreak of bird flu, people tend to consume less live poultry but more canned food. As a result, the price of the canned food of a particular brand changed by 50% and its quantity transacted rose from 1 000 cans to 1 350 cans per month. We can conclude that within the above price range this canned food had

- A. an elastic demand.
- B. an inelastic demand.
- C. an elastic supply.
- D. an inelastic supply.

2007/CE/II/09

The table below shows the relationship between the price of Good X and its sales revenue.

Price (\$)	10	20	30
Sales revenue (\$)	1 000	1 500	2 000

Within the above price range, the elasticity of demand for Good X is

- A. equal to zero.
- B. greater than zero and smaller than one.
- C. equal to one.
- D. greater than one.

2007/CE/II/11

The imposition of a per unit sales tax on a good will reduce its equilibrium quantity if

- A. the demand is inelastic.
- B. the demand is elastic.
- C. the demand is unitarily elastic.
- D. All of the above are correct.

2008/CE/II/06

Recently the stock market in Shanghai has become overheated. Compared with last year, the selling price of a financial magazine has increased from RMB¥5 to RMB¥8 while its sales volume has increased by 10%.

In the above case,

- A. the law of demand is violated.
- B. the demand curve of the magazine can still be downward sloping.
- C. the demand for the magazine is inelastic.
- D. the supply of the magazine is elastic.

2008/CE/II/10

With the introduction of high definition television (HD TV) broadcasting in Hong Kong, more people have chosen to buy an HD TV set. Under what condition will the market price of HD TV sets remain unchanged?

- A. The income of consumers increases.
- B. The government grants a cash subsidy to lower income groups to buy HD TV sets.
- C. The demand for HD TV sets is perfectly inelastic.
- D. The supply of HD TV sets is perfectly elastic.

2009/CE/II/09

Mr Chan travels frequently between Hong Kong and Beijing on business trips. Last year, even though the price of air-tickets increased by 50%, Mr Chan's total expenditure on these air-tickets remained unchanged. If Mr Chan's demand for these air-tickets last year remained the same as the previous year, his demand for these air-tickets last year would have been

- A. perfectly inelastic.
- B. inelastic.
- C. unitarily elastic.
- D. elastic.

2009/CE/II/10

Suppose with the more popular use of iPods (portable media players), the price of the traditional MP3 players has fallen by 40% and the quantity sold has changed by 50%.

This would indicate that within that price range, there was an _____ for the traditional MP3 player.

- A. elastic demand
- B. inelastic demand
- C. elastic supply
- D. inelastic supply

2010/CE/II/07

Most Hong Kong people use either town gas or electricity for cooking. Suppose there is a drastic increase in electricity charges. Consumers' expenditure on electricity consumption _____ but their expenditure on town gas consumption _____

- A. will decrease will increase
- B. will increase may increase or decrease
- C. may remain unchanged will decrease
- D. may increase or decrease will increase

2010/CE/II/09

The demand elasticity of Good X is equal to one. Which of the following is a correct description of Good X ?

- A. An increase in its price will not affect the quantity demanded.
- B. An increase in the price of its substitute will not affect the quantity demanded.
- C. The imposition of a per unit sales tax on it will not affect consumers' expenditure on it.
- D. A per unit subsidy offered by the government will not affect the total revenue (including the subsidy) of the sellers.

2010/CE/II/10

Suppose an increase in the demand for Good Y results in a 10% and 5% change in its price and quantity transacted respectively. Which of the following could explain the extent of the change in the price and the quantity transacted?

- A. The good is a habit-forming good.
- B. There are no close substitutes for the good.
- C. Firms producing the good have excess capacity in production.
- D. Firms producing the good have used factor inputs which are more specialized.

2012/DSE/I/11

Michelle is a jewelry lover and she says, "I will spend all my monthly salary on jewelry no matter what the price is." From this we can conclude that her demand for jewelry is

- A. elastic.
- B. inelastic.
- C. unitarily elastic.
- D. perfectly inelastic.

2012/DSE/I/12

Owing to continuous bad weather, the quantity transacted of local vegetables falls by 40% while the price rises by 13%. Which of the following statements are correct?

- (1) The quantity demanded of local vegetables falls.
- (2) The total expenditure on local vegetables rises.
- (3) The demand for imported vegetables rises.
- (4) The total expenditure on imported vegetables may rise or fall depending on the elasticity of demand.

- A. (1) and (2) only
- B. (1) and (3) only
- C. (2) and (4) only
- D. (3) and (4) only

2014/DSE/I/13

Which of the following would reduce the elasticity of demand for the transport service of the Airport Express?

- A. There are more airport bus routes to different districts.
- B. Vans are not allowed to pick up passengers at the airport.
- C. The fare of the Airport Express is raised.
- D. The maintenance cost of the Airport Express trains increases.

2015/DSE/I/11

The table below shows the relationship between the price of and the total expenditure on ice-cream.

Unit price (\$)	5	6	7	8
Total expenditure (\$)	25	30	35	40

From the above table, we can conclude that the elasticity of demand for ice-cream is _____ (without regard to its negative sign)

- A. between zero and one
- B. equal to zero
- C. larger than one
- D. equal to one

2016/DSE/I/15

A decrease in the cost of producing Good X results in a 5% and 10% change in its price and quantity transacted respectively. Which of the following best explains the above changes?

- A. Good X is a durable good.
- B. There are no close substitutes for Good X.
- C. Firms producing Good X have excess capacity in production.
- D. The factors of production for Good X are not easily available.

2019/DSE/I/11

Study the following news abstract.

A Dengue fever (登革熱) scare has hit Hong Kong after 19 people in the past week were confirmed to have contracted the virus locally. Dengue fever is transmitted to humans by *Aedes albopictus* (白紋伊蚊), a type of mosquito commonly found in Hong Kong.

Suppose the price and the quantity of mosquito repellents sold in Hong Kong changed by 5% and 120% respectively shortly after the release of the above news. This indicates that during that period and within the price range, there was an _____ the mosquito repellents in Hong Kong.

- A. elastic supply of
- B. inelastic supply of
- C. elastic demand for
- D. inelastic demand for

2020/DSE/I/11

When the price of Australia's red wine decreases from \$70 to \$50, the quantity demanded increases from 100 units to 122 units. What is the arc elasticity of demand for Australia's red wine within the above price range?

- A. 0.59
- B. 0.77
- C. 1.30
- D. 1.68

2017/DSE/1/15

Refer to the following conversation between Mandy and Shirley.

- Mandy: I like coffee very much! No matter how its price changes, I always buy the same amount of coffee every week!
- Shirley: I like coffee very much too! No matter how its price changes, I always spend the same amount of money on coffee every week!

Based on their conversation, Mandy's demand for coffee is _____ and Shirley's demand for coffee is _____

- A. perfectly inelastic perfectly inelastic
B. perfectly inelastic unitarily elastic
C. unitarily elastic perfectly inelastic
D. unitarily elastic unitarily elastic

2018/DSE/1/17

The original price of Sausage McMuffin with Egg was \$11 each. McDonald's introduced the following discount in a limited time.



As a result, more people bought Sausage McMuffin with Egg during the promotion period. Which of the following statements about this situation is correct?

- A. McDonald's was not maximising profit during the promotion period.
B. The demand for Sausage McMuffin with Egg would be higher during the promotion period.
C. The total expenditure of consumers on Sausage McMuffin with Egg would increase if the demand was elastic.
D. There would be a temporary shortage of the food ingredients for making Sausage McMuffin with Egg.

Short & Structured Questions

1992/CE/1/1(d)

In Hong Kong, the number of urban taxi licences issued by the government is fixed.

- (i) Draw a supply curve to illustrate this situation (2 marks)
- (ii) Suppose the government decides to issue more urban taxi licences. With the aid of a supply and demand diagram, explain
- (I) how the market price of an urban taxi licence will be affected, and
- (II) why the total market value of all urban taxi licences in Hong Kong might increase. (10 marks)

1993/CE/1/1(a)

'Yummy Yummy' is a fast food shop. In a promotion campaign, the shop reduced its selling price of a hamburger from \$4.2 to \$3.5. Later it was learnt that the total expenditure of customers on hamburgers increased despite the price cut. With the aid of a diagram, explain this phenomenon in terms of the price elasticity of demand. (7 marks)

1994/CE/1/1(b)

Suppose a typhoon destroys a large quantity of vegetables of Country A. However, the total revenue from the sale of vegetables increases. With the aid of a diagram, explain this phenomenon in terms of the price elasticity of demand. (7 marks)

1996/CE/1/1(a)

Newspapers in Hong Kong entered into a price war at the end of 1995. The following is a conversation between two managers of a newspaper.

General manager: 'A price-cut will reduce our newspaper's total sales revenue.'

Sales manager: 'Even if we do not cut our price, the total sales revenue will still decrease when others cut theirs.'

Explain the argument behind **EACH** of the above statements with the aid of a separate diagram. (11 marks)

1997/CE/1/1(c)

Suppose there is a drastic increase in sewage charges which affects the total revenue of local restaurants. With the aid of a diagram, explain the condition under which the total revenue would decrease. (8 marks)

2000/CE/1/1(b)

With the aid of a diagram, explain the condition under which a large emigration of Country A's workers to Country B would lead to a decrease in the total income of all workers (including those immigrants) in Country B. (8 marks)

2001/CE/1/2

Suppose the postage charge of a country is fixed. When e-commerce and e-mail becomes popular, the revenue of the country's Post Office from the postage charge falls sharply.

- (a) Indicate in a diagram the decrease in the postage charge revenue of the Post Office.
- (b) In order to compensate for the decrease in revenue, the Post Office increases its postage charge. Indicate in the diagram in (a) the change in revenue of the Post Office due to the increase in postage charge. (5 marks)

2003/CE/1/9(a)

Deflation has occurred in Hong Kong since 1998.

A government official has said, 'Deflation in Hong Kong would stimulate its exports.'

With the aid of a diagram, explain under what condition would deflation increase Hong Kong's total export value (in terms of the Hong Kong dollar). (7 marks)

2005/CE/I/9

The Western Harbour Crossing (俗稱西隧) has no traffic congestion problem. In July 2004, its tolls increased (except for taxis).

(a) With the aid of a diagram, explain under what condition an increase in the tolls would increase the sales revenue of the tunnel company. (6 marks)

(b) (i) The traffic using the Cross Harbour Tunnel (俗稱紅隧) is congested during the rush hours.

While the tolls of the Western Harbour Crossing increases, the tolls of the Cross Harbour Tunnel remains unchanged. With the aid of a diagram, explain why in this situation, the traffic using the Cross Harbour Tunnel during the rush hours would become more congested. (6 marks)

2009/CE/I/9(b)

In recent years, the price of textbooks has become a public concern.

The price of paper has increased sharply in recent years. With the aid of a diagram, explain under what condition publishers' total revenue from the sale of textbooks would increase. (8 marks)

2013/DSE/I/9(a)

The following is an extract from a local newspaper article.

The MTR corporation raised the railway fares by 5.4% in 2012. This increase was based on the Fare Adjustment Mechanism set by the government. To respond to the discontent of the public over the fare increase, the Corporation introduced a concessionary measure "Ride 10 Get 1 Free".

With the aid of a diagram, explain under what condition the total expenditure of passengers on the MTR will increase because of the rise in fare. (5 marks)

2015/DSE/I/11(c)

Tobacco duty is an indirect tax in Hong Kong. The Financial Secretary has increased the tobacco duty rate with the aim of discouraging smoking.

An economist stated, "Other thing being constant, the rise in the tobacco duty rate would not effectively reduce the quantity consumed of duty-paid cigarettes." Justify his statement **WITHOUT** using a diagram. (4 marks)

2017/DSE/I/10(c)

MTR Corporation Limited (stock code: 66) provides railway services in Hong Kong.

Table 1: Business information about the local services of MTR

Year	Fare Adjustment Rate	Total Passengers Boarding (In million)	Total Revenue (HK\$ million)
2012	+5.4%	1 431	14 523
2013	+2.7%	1 475	15 166
2014	+3.6%	1 548	16 223

Based on Table 1, can we conclude that 'the increase in total revenue is a result of inelastic demand for the local services of MTR'? Explain your answer with the aid of a diagram. (7 marks)

2018/DSE/I/5(a)

During peak flu seasons, there is not enough medical staff in public hospitals in Hong Kong.

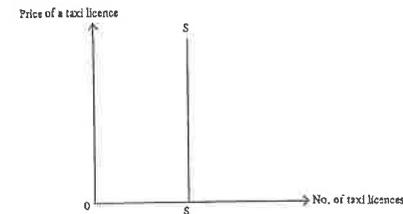
An economist stated, 'Even if the government sharply increases the wage rates of the medical staff, it is still difficult to relieve the problem' Justify his statement using the concept of elasticity of supply / demand. (3 marks)

MARKING SCHEME

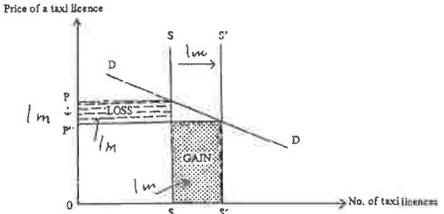
1990/CE/II/05 B	1995/CE/II/07 B	2000/CE/II/10 A	2006/CE/II/09 D (14%)	2010/CE/II/10 D (20%)
1990/CE/II/26 C	1996/CE/II/10 C	2002/CE/II/08 A (44%)	2007/CE/II/09 B (55%)	2012/DSE/II/11 C (45%)
1991/CE/II/19 C	1997/CE/II/08 D	2002/CE/II/10 B (34%)	2007/CE/II/11 D (52%)	2012/DSE/II/12 B (61%)
1991/CE/II/23 C	1997/CE/II/09 C	2003/CE/II/05 C (51%)	2008/CE/II/06 B (24%)	2014/DSE/II/13 B (60%)
1991/CE/II/57 C	1997/CE/II/10 D	2003/CE/II/07 C (55%)	2008/CE/II/10 D (56%)	2015/DSE/II/11 B (47%)
1992/CE/II/28 C	1998/CE/II/06 B	2003/CE/II/09 B (45%)	2009/CE/II/09 C (62%)	2016/DSE/II/15 A (37%)
1993/CE/II/20 D	1998/CE/II/07 C	2003/CE/II/13 D (59%)	2009/CE/II/10 C (26%)	2017/DSE/II/15 B (84%)
1993/CE/II/25 A	2000/CE/II/03 A	2004/CE/II/09 C (51%)	2010/CE/II/07 D (52%)	2018/DSE/II/17 C (63%)
1993/CE/II/28 C	2000/CE/II/05 A	2005/CE/II/12 A (32%)	2010/CE/II/09 C (42%)	2019/DSE/II/11 A
2020/DSE/II/ A				

Note: Figures in brackets indicate the percentages of candidates choosing the correct answers.

1992/CE/II/11(d)
(i)



(ii)



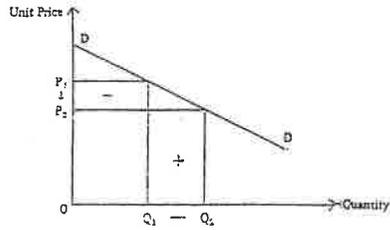
(ii) Indicate in the diagram:

- supply curve shifts to the right (1)
- $P \downarrow$ (1)
- correct position of 'gain' and 'loss' (1)
- gain > loss (1)

Verbal explanation:

- (I) The price of a taxi licence will decrease, because there is an increase in supply. (1)
- (II) If the demand for taxi licences is elastic, the percentage increase in quantity demanded will be larger than the percentage decrease in price. (2)

1993/CE/1/1(a)



Indicate in the diagram:

- correct position of 'gain' and 'loss'
- gain > loss

(1)

(1)

Verbal explanation:

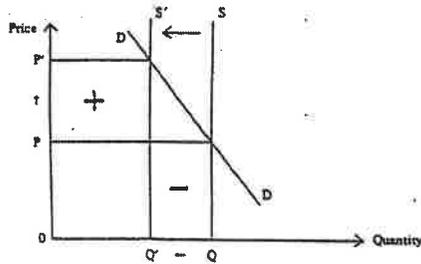
The demand for hamburgers is elastic (because there are substitutes).

(2)

The percentage decrease in price is smaller than the percentage increase in quantity demanded.

(3)

1994/CE/1/11(b)



Indicate in the diagram:

- supply curve shifts to the left
- correct position of 'gain' and 'loss'
- gain > loss

(1)

(1)

(1)

Verbal explanation:

Since the demand is inelastic,

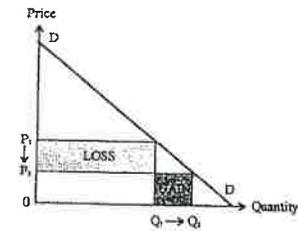
(1)

the percentage increase in price is larger than the percentage decrease in quantity sold.

(3)

1996/CE/1/1(a)

General manager:



Indicate in the diagram:

- P ↓ & Q ↑
- correct position of 'gain' and 'loss'
- gain < loss

(1)

(1)

(1)

Verbal explanation:

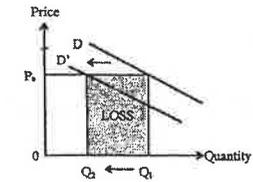
The demand is inelastic,

(1)

the percentage increase in quantity demanded is smaller than the percentage decrease in price.

(2)

Sales manager:



Indicate in the diagram:

- demand curve shifts to the left
- P unchanged & Q ↓
- loss

(1)

(1)

(1)

Verbal explanation:

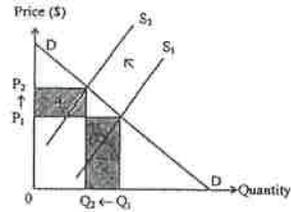
The demand for this newspaper would decrease (because different newspapers are substitutes for each other).

(1)

The quantity transacted decreases.

(1)

1997/CE/11(c)



Indicate in the diagram:

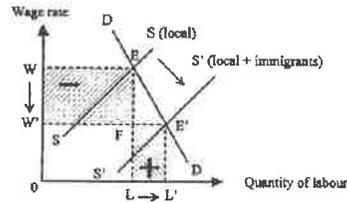
- supply curve shifts to the left
- $P \uparrow$ & $Q \downarrow$
- correct position of 'gain' and 'loss'
- gain < loss

Verbal explanation:

The supply of restaurant services decreases (because of an increase in production cost).
The demand is elastic,
the percentage increase in price is smaller than the percentage decrease in quantity demanded.

- (1)
- (1)
- (1)
- (1)
- (1)
- (1)
- (3)

2000/CE/11(b)



Indicate in the graph:

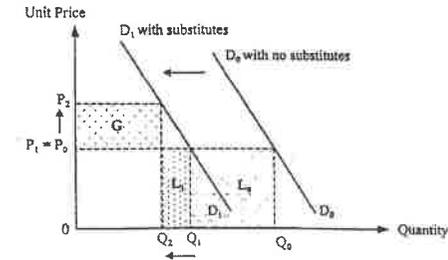
- S (local people) shifts rightward to S' (local + immigrants)
- correct position of 'gain' and 'loss'
- loss > gain

Verbal explanation:

The supply of labour increases
The demand is inelastic,
the percentage decrease in wage rate is larger than the percentage increase in employment

- (1)
- (1)
- (1)
- (1)
- (1)
- (1)
- (3)

2001/CE/1/2



(a) Indicate in the graph:

- demand curve shifts to the left
- fixed postage charge, i.e., $P_1 = P_0$
- L_1 = decrease in total revenue

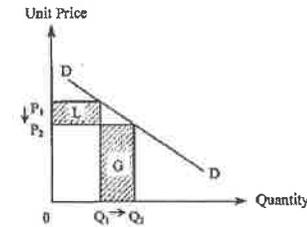
- (1)
- (1)
- (1)

(b) Indicate in the graph:

- L_1 = new loss in total revenue
- G = new gain in total revenue

- (1)
- (1)

2003/CE/1/9(a)



Indicate in the diagram:

- $P \downarrow$ and $Q \uparrow$
- revenue loss < revenue gain

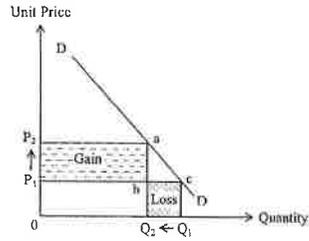
- (1)
- (2)

Verbal elaboration:

The fall in export prices leads to an increase in the export volume.
As the demand for HK exports is elastic,
the percentage change in export price is smaller than the percentage change in the export volume.

- (1)
- (1)
- (2)

2005/CE/1/9
(a)



Indicate on the diagram:

- Area abP_1P_2 = Gain, Area bcQ_1Q_2 = Loss
- Gain > Loss

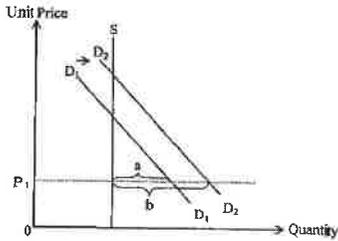
(1)
(1)

Verbal elaboration:

- (After the increase in tolls,) the quantity demanded decreases.
- The demand for the tunnel service is inelastic,
- the percentage change in price is larger than the percentage change in quantity demanded.

(1)
(1)
(2)

(b) (i)



Indicate on the diagram:

- price (P_1) is below the equilibrium price
- rightward shift of the demand curve
- excess demand increases from a to b

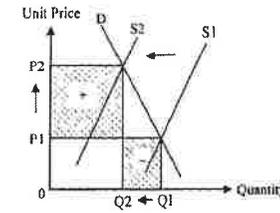
(1)
(1)
(1)

Verbal elaboration:

- The Cross Harbour Tunnel is a substitute of the Western Harbour Crossing.
- The demand for the Cross Harbour Tunnel's service increases.
- (With a fixed price,) the excess demand would increase.

(1)
(1)
(1)

2009/CE/1/9(b)



Indicate in the diagram:

- supply curve shifts to the left
- $Q \downarrow$ and $P \uparrow$
- loss in total revenue < gain in total revenue

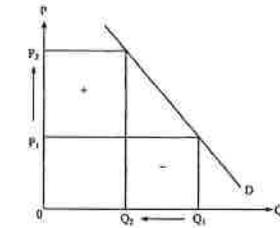
(1)
(1)
(2)

Verbal elaboration:

- The supply of textbooks decreases, because the cost of production has increased.
- The price increases and the quantity transacted decreases.
- If the demand is inelastic,
- the percentage change in quantity demanded is smaller than the percentage change in price.

(1)
(1)
(1)
(1)

2013/DSE/1/9(a)



Indicate on the diagram:

- correction position of gain and loss
- gain > loss

(1)
(1)

Verbal elaboration:

- If the demand for MTR service is inelastic,
- the percentage increase in fare will be higher than the percentage decrease in the number of trips (, so the total expenditure will increase).

(1)
(2)

2015/DSE/1/11(c)

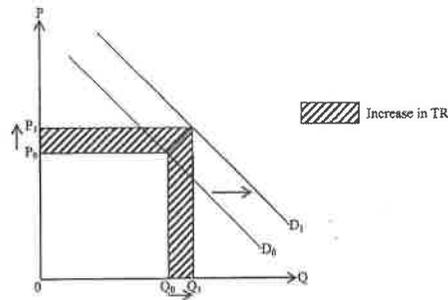
- Tobacco duty would increase the market price of duty-paid cigarettes and thus reduce its quantity demanded.

(1)

- If cigarette consumers are addicted,
- their demand for cigarettes would be inelastic, so
- the percentage decrease in quantity demanded would be smaller than the percentage increase in price.

(1)
(1)
(1)

2017/DSE/1/10(c)



Illustrate in the diagram:

- rightward shift in the demand curve
- higher price and quantity
- higher total revenue

(1)
(1)
(1)

Verbal elaboration:

No, because there was a rise in demand. As both the price and the quantity transacted have increased, total revenue has increased.

(1)
(2)
(2)
(1)
(Max: 7)

2018/DSE/1/5(a)

The supply of medical staff may be inelastic because they require special training and qualification. (Even if the government raises their wage rates sharply,) the percentage increase in the quantity supplied of medical staff would still be smaller than the percentage increase in their wage rates.

(1)
(1)
(1)

7.2 EFFICIENCY & SOCIAL SURPLUS

Multiple Choice Questions

1985/AL/1/22

Consumer surplus is the

- A. excess quantity of a good which the consumer cannot consume.
- B. quantity of a good which the consumer chooses not to consume.
- C. extra satisfaction which the consumer enjoys in the purchase of a good.
- D. extra amount the consumer is willing to pay over and above what he actually pays.

1986/AL/1/15

Consumer surplus is

- A. the amount left over after a consumer makes a purchase.
- B. the quantity supplied to a consumer exceeding the quantity he prefers.
- C. the difference between what a consumer is willing to pay over and above what he actually pays.
- D. the area underneath the consumer's demand curve.

1990/AL/1/02

'Consumer equilibrium' means

- A. to each individual, the marginal benefit of a good is equal to its price.
- B. to each individual, the marginal benefit of every good is equal.
- C. to each individual, his total expenditure is equal to his total income.
- D. the marginal benefit of a good is the same for all consumers in the market.

1991/AL/1/08

Which of the following statements about 'benefit' is true?

- A. When a good has a benefit, it must have a market value.
- B. A good has a high market value if it has a high benefit.
- C. The total benefit of a good is the intrinsic value of that good.
- D. The marginal benefit of a good to a person depends on the quantity of that good which he already possesses.

1995/AL/1/03

Currently, with no entrance fee, the flow of visitors to the Hong Kong Park does not reach its full capacity. If the government now charges an entrance fee,

- A. the consumers' surplus will rise.
- B. the total benefit will decline.
- C. the marginal benefit will fall.
- D. the cost of maintenance will rise.

1995/AL/1/06

If floods in China destroyed half the output of rice, the total benefit of rice will

- A. rise but the total market value may rise or fall.
- B. fall but the total market value may rise or fall.
- C. fall but the total market value will rise.
- D. rise but the total market value will fall.

1997/AL/1/07
A free good

- A. is provided by the government free of charge.
- B. has no benefit and is not preferred.
- C. is a good the supply of which is so abundant that more of it is not preferred.
- D. is a gift of nature.

1998/AL/1/12

Due to exceptionally good weather, the supply of wheat has increased. The total benefit of wheat will _____ and the total market value _____.

- A. decrease will decrease
- B. increase will increase
- C. decrease may decrease or increase
- D. increase may decrease or increase

1998/AL/1/24

Mary spent \$500 to enter a lucky draw and won an airline ticket with a market price of \$3 000. The ticket was neither transferable nor refundable. Which of the following is correct?

- A. It is costless for Mary to use the ticket.
- B. (out of syllabus)
- C. The ticket must worth more than \$500 to Mary.
- D. None of the above.

2000/AL/1/10

A free good is a good that yields zero

- A. marginal benefit.
- B. average benefit.
- C. total benefit.
- D. consumer surplus.

2001/AL/1/19

A free good

- A. is less preferable than an economic good.
- B. has zero marginal benefit.
- C. is a good that has no demand.
- D. is a good provided by a generous person free of charge.

2002/AL/1/10

Market price

- A. is a criterion which determines who wins and who loses.
- B. is the maximum amount a consumer is willing to pay at the margin.
- C. may not be necessary in directing the use of scarce resources.
- D. All of the above.

2003/AL/1/11

In production, resource allocation is said to be efficient when

- A. the marginal cost of production equals the marginal benefit.
- B. the marginal benefit equals the product price.
- C. the marginal cost of production equals the marginal revenue.
- D. the marginal cost of production equals the average cost of production.

2006/AL/1/02

The marginal benefit of an individual on a good

- A. is observable.
- B. is asserted to be decreasing.
- C. always begins with a positive value.
- D. has to be expressed in terms of money.

2006/AL/1/23

Satisfaction of the efficiency condition implies that

- A. (out of syllabus)
- B. there is no scarcity of resources.
- C. the value of all resources is maximized.
- D. all costs of transactions are zero.

2008/AL/1/05

Consumer surplus is

- A. what a consumer possesses that is more than he can consume.
- B. what a consumer has purchased that is more than he intended.
- C. that part of benefit of a good exceeding the expenditure.
- D. that part of income a consumer donated to charity.

2010/AL/1/07

The market price of a good

- A. reflects its marginal benefit.
- B. is determined by its total benefit.
- C. is a competitive criterion that leads to inefficiency.
- D. will not exist in the absence of money.

2012/AL/1/01

A free good

- A. is provided by the government free of charge.
- B. has zero marginal benefit.
- C. is less preferable than an economic good.
- D. has no demand.

2012/AL/1/05

Susan says, "I won't eat any more pineapple unless you pay me!" Which of the following statements is correct?

- A. The demand curve of Susan cannot be drawn.
- B. The marginal benefit of pineapple to Susan is zero.
- C. (out of syllabus)
- D. Susan's demand for pineapple is perfectly inelastic.

2012/AL/1/07

If floods in Thailand have destroyed more than half of her crops, the total market value of the crops

- A. may rise or fall but the total benefit will rise.
- B. may rise or fall but the total benefit will fall.
- C. will rise but the total benefit will fall.
- D. will fall but the total benefit will rise.

2012/AL/1/16

A video-rental club charges \$20 per movie, or consumers can purchase a pre-paid coupon at a charge of \$100 for 10 movies. Which of the following statements is correct?

- A. The consumer surplus of a coupon purchaser is larger.
- B. The consumer surplus of a non-coupon purchaser is larger.
- C. The consumer surplus is roughly the same either way.
- D. There is not enough information to tell which way yields a larger consumer surplus.

PP/DSE/1/12

The following table shows the total cost schedule of a price-taking firm which has a fixed cost equal to \$20.

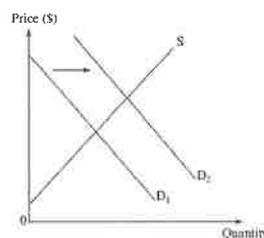
Quantity (units)	Total cost (\$)
1	40
2	65
3	95
4	130
5	170

Suppose the market price is \$35. At the profit-maximizing output level, the firm's profit and total producer surplus are _____ and _____ respectively.

- A. \$10 \$10
- B. \$10 \$30
- C. \$30 \$10
- D. \$30 \$30

PP/DSE/1/14

The following diagram shows the demand and supply curves of good X in a perfectly competitive market.



There is a shift in the demand curve for good X from D_1 to D_2 . As a result,

- A. firms enjoy more producer surplus.
- B. the marginal cost of producing the last unit decreases.
- C. the supply of good X increases.
- D. consumers enjoy less consumer surplus

PP/DSE/1/17

Economic efficiency is attained when

- (1) Total benefits to consumers are maximized.
- (2) All potential gains are fully captured.
- (3) Marginal social benefits are equal to marginal social costs.

- A. (1) and (2) only
- B. (1) and (3) only
- C. (2) and (3) only
- D. (1), (2) and (3)

2012/DSE/1/14

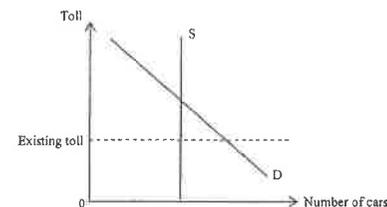
On 10th July 2011, the urban taxi fare for the first 2 km was raised from \$18 to \$20. Which of the following statements about the urban taxi service are correct?

- (1) The demand for taxi service dropped.
- (2) The price of long-distance taxi trips relative to short-distance taxi trips dropped.
- (3) The consumer surplus for the taxi service dropped.

- A. (1) and (2) only
- B. (1) and (3) only
- C. (2) and (3) only
- D. (1), (2) and (3)

2014/DSE/1/15

Refer to the following supply-demand diagram for the Cross-Harbour Tunnel.



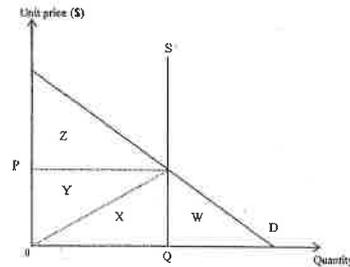
The government proposed to raise the toll for the Cross-Harbour Tunnel so as to lessen the traffic congestion during rush hours. Suppose the maximum vehicular volume of the tunnel is fixed. Which of the following statements are correct?

- (1) The demand for the service of the Cross-Harbour Tunnel will decrease.
- (2) The total revenue of the Cross-Harbour Tunnel will increase.
- (3) The deadweight loss caused by traffic congestion will decrease.
- (4) The opportunity cost of the drivers using the tunnel will increase.

- A. (1) and (3) only
- B. (1) and (4) only
- C. (2) and (3) only
- D. (2) and (4) only

2015/DSE/I/22

Refer to the following diagram.



The maximum total social surplus is equal to _____

- A. Area Z.
- B. Area (Y+Z)
- C. Area (W+X+Y)
- D. Area (X+Y+Z)

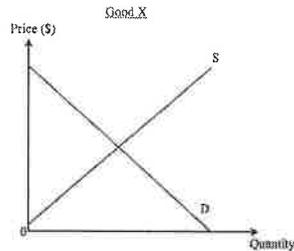
2016/DSE/I/21

In which of the following situations is efficiency attained?

- A. Total social benefit is equal to total social cost.
- B. Producer surplus is equal to consumer surplus.
- C. The difference between marginal social benefit and marginal social cost is zero.
- D. The consumer surplus of all consumers in the market is maximised.

2016/DSE/I/22

The following diagram shows the supply and demand curves of Good X.



Good X and Good Y are in competitive supply. A rise in the demand for Good Y will lead to _____ in the consumer surplus and _____ in the producer surplus in the market of Good X.

(Assume the supply and demand curves of Good X shift in a parallel manner.)

- A. an increase an increase
- B. an increase a decrease
- C. a decrease an increase
- D. a decrease a decrease

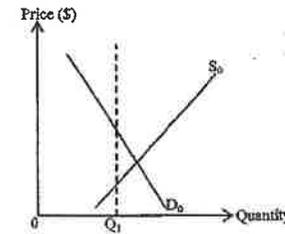
2017/DSE/I/12

A famous artist, Tsz-Wah, held a show. Many people complained that they could not buy a ticket. Ticket touts resold the tickets on the Internet and some buyers paid a price higher than HK\$10 000 for a ticket. The above case illustrates the _____ function of price because _____

- A. rationing the tickets are rationed to the highest-valued buyers
- B. rationing demand will be reduced by a higher price
- C. allocative more profits can be earned with a higher price
- D. allocative more resources should be allocated to the producer to raise the supply

2019/DSE/I/21

Refer to the following supply-demand diagram of Good X.



If the government sets a quota at Q_1 , then _____ will decrease.

- (1) total social surplus
- (2) total expenditure on Good X
- (3) consumer surplus
- (4) producer surplus

- A. (1) and (2) only
- B. (1) and (3) only
- C. (2) and (4) only
- D. (3) and (4) only

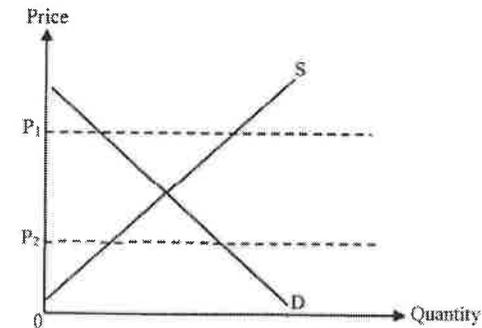
2019/DSE/I/22

Suppose there is a bad harvest of flowers due to global warming. The marginal benefit of flowers will _____ and the total exchange value _____

- A. decrease will decrease
- B. increase will increase
- C. decrease may decrease or increase
- D. increase may decrease or increase

2021/DSE/I/17

Refer to the following demand-supply diagram of Good Y.



If the government lowers the price ceiling of Good Y from P_1 to P_2 ,

- A. the producer surplus will decrease.
- B. the consumer surplus will increase.
- C. the total social surplus will remain unchanged.
- D. the excess supply of Good Y will be eliminated.

2021/DSE/1/19

Since most schools deliver their lessons online, more students need to buy tablet computers. The marginal cost of the last unit of tablet computers will _____ and the producer surplus will _____.

- A. decrease ... increase
- B. decrease ... decrease
- C. increase ... increase
- D. increase ... decrease

2021/DSE/1/20

Initially a country imposes an effective quota on coffee bean production.

If now more people like to drink coffee, which of the following statements about coffee bean market are correct?

- (1) The total expenditure will increase.
 - (2) The deadweight loss will increase.
 - (3) The consumer surplus will increase.
- A. (1) and (2) only
 - B. (1) and (3) only
 - C. (2) and (3) only
 - D. (1), (2) and (3)

Microeconomics by Topic
7. Demand & Supply (II)

Short & Structured Questions

1988/AL/1/2

'The maximum one is willing to pay is marginal benefit.' Why is the word maximum associated with marginal benefit?

1989/AL/1/1

What is price?

1992/AL/1/6

In the State of Washington, one who wishes to hunt for mountain goats must obtain a special goat permit. Each year approximately 8 000 people apply for goat permits. A draw is held to select 1 000 'winners'. Each winner may then purchase a goat permit for US\$20.00, entitling him to kill a maximum of one goat over a one-year period. Permits are not legally transferable, nor can they be resold, in any form. Each year about 250 permit holders succeed in killing a goat.

If the goat permits were allowed to be resold in a free market, would the new price be higher or lower? And would more goats be killed? Explain.

1994/AL/1/8

Compact discs of popular songs are now being reproduced on a massive scale in China. This reproduction is illegal, and the reproduced discs are sold in the market at significantly lower prices than the original discs.

From the standpoint of maximizing social gains, should the illegal practice of reproducing discs be firmly suppressed so that only the higher-priced original discs can be found on the market? Explain.

1997/AL/1/8(a)

University education in Hong Kong is heavily subsidized by the government. Under this system, admission to university as well as the selections of university and field of study are based on examination results. Imagine that there is an alternative system in which students are admitted according to their willingness and ability to pay the highest price (tuition).

Of the numerous differences between these two systems, analyse only the following: How hard students will study in a university, when each and every university sets a firm standard requirement for graduation and the award of a degree.

2002/AL/1/06(b)

The Western Harbour Tunnel cost \$7 billion to build. After several years of operation the traffic flow remains far less than anticipated. Since the cost of serving an extra car is zero, in order to maximize wealth, the tunnel company simply charges a toll per car to maximize total revenue.

Some economists argue that if the cost of serving an extra car is zero, as it will be if the tunnel has no traffic congestion, then, to maximize social surplus, no toll should be charged. The counter argument to this is that if no toll is charged, no private enterprise will build the tunnel. Now the tunnel is already built, and the cost in the past is no longer an opportunity cost. Will society gain if the government purchases the tunnel and lets all cars use it free of charge?

2006/AL/1/5

Illustrate and explain why the efficiency condition is not satisfied in buffet dinners.

2006/AL/1/9

Whereas ladies from mainland China are coming to Hong Kong to buy the authentic handbags bearing prestigious brand names, ladies from Hong Kong are going to Shenzhen to buy fake handbags bearing the same brand names. The handbags look alike, but the authentic ones cost nearly 50 times more than the fake ones, even though they are only slightly more durable.

Does this imply that the ladies from China are richer than the Hong Kong ladies? Why would they pay such high prices for handbags which are expected to be only slightly more durable?

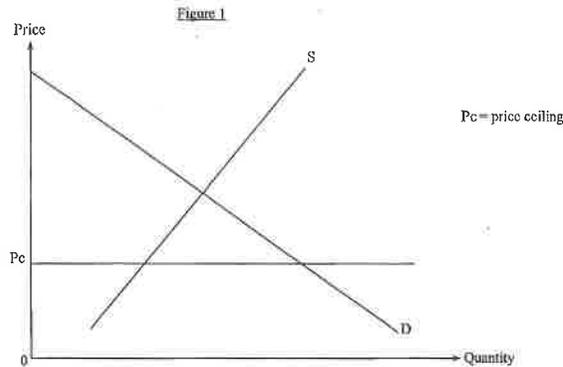
2009/AL/V/7(a)

In the United States, hunting of wildlife is restricted to certain seasons of the year. For residents of a given state, hunting licences for different species are required and each species bears a different licence fee. Out-of-state residents who want to hunt in the same state are required to pay higher licence fees.

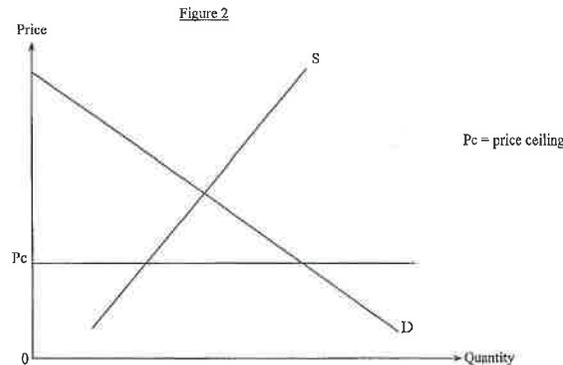
Do you expect the out-of-state licence holders to be better hunters than the licence holders of the resident state? Explain.

PP/DSE/1/4

- (a) What is 'deadweight loss'? (2 marks)
- (b) A teacher said, 'An effective price ceiling may increase the consumer surplus.'
His student replied, 'If this is the case, the price ceiling may enhance economic efficiency!'
- (i) Do you agree with the teacher? Illustrate your answer in Figure 1. (3 marks)



- (ii) Do you agree with the student? Explain your answer with the aid of Figure 2. (5 marks)



PP/DSE/1/12(b)(i)

In November 2010, the animated version of the Riverside Scene at the Qingming Festival (電子動態版清明上河圖) was exhibited in Hong Kong. 600 000 tickets were sold at \$10 each through the URBIX outlets and the Internet. Tickets were sold out within a short period of time. Many citizens complained that they could not purchase any tickets.

Some people paid \$200 to buy a ticket from touts (黃牛黨). State the function of price in the above case. (1 mark)

2015/DSE/1/4(a)

Read the following news extract.

The strong preference for small flats has pushed the prices of the flats under 400 square feet to a new high in the past few months. It is expected that more and more small flats will be available for sale in the coming future.

Explain ONE function of price which can be found in the above news extract. (2 marks)

2016/DSE/1/11

Medical service is one of the basic human needs.

Source A: a conversation outside a public clinic in Hong Kong

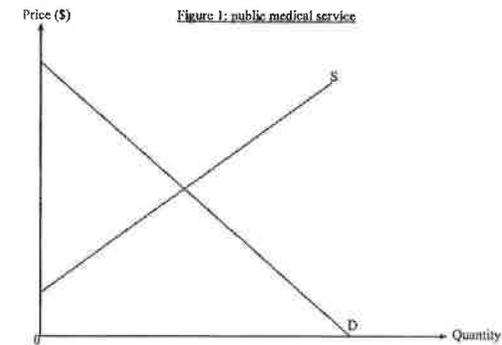
Son: Dad, I feel very ill.

Father: Oh no! There is a long queue waiting.

Son: Why don't we go to a private doctor?

Father: The fee charged by public clinics is only \$45, much lower than that charged by private doctors.

- (b) With reference to Source A, explain with the aid of Figure 1 how the price set by public clinics may lead to economic inefficiency in the provision of public medical service. (6 marks)
(Assume the supply curve in Figure 1 fully reflects the marginal social cost of public medical service.)



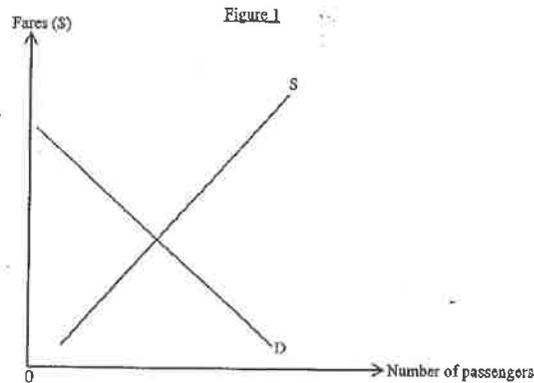
Source B: an extract from the Hospital Authority webpage

The Hospital Authority is committed to providing community-based primary care services. Our target patients include the elderly, low-income individuals, and patients with chronic diseases.

- (d) Many people argue that public clinics should raise the fee to reduce the waiting time. Evaluate this argument in terms of economic efficiency. (2 marks)

The Guangzhou-Shenzhen-Hong Kong Express Rail Link (High Speed Rail) was launched in September 2018.

- (a) Explain the effect of the launch of High Speed Rail on labour mobility of Hong Kong. (3 marks)
- (b) During non-holidays, there are a lot of empty seats on some trains of the High Speed Rail. With the aid of Figure 1, explain why the above situation may be inefficient. (4 marks)



MARKING SCHEME

1985/AL/I/22 D	1997/AL/I/07 C	2003/AL/I/11 A	2012/AL/I/05 B (45%)	2012/DSE/I/14 C (64%)
1986/AL/I/15 C	1998/AL/I/12 D	2006/AL/I/02 B (71%)	2012/AL/I/07 B (68%)	2014/DSE/I/15 C (54%)
1990/AL/I/02 A	1998/AL/I/24 A	2006/AL/I/23 C (53%)	2012/AL/I/16 D (67%)	2015/DSE/I/22 D (64%)
1991/AL/I/08 D	2000/AL/I/10 A	2008/AL/I/05 C (94%)	PP/DSE/I/12 B	2016/DSE/I/21 C (68%)
1995/AL/I/03 B	2001/AL/I/19 B	2010/AL/I/07 A (85%)	PP/DSE/I/14 A	2016/DSE/I/22 D (61%)
1995/AL/I/06 B	2002/AL/I/10 D	2012/AL/I/01 B (70%)	PP/DSE/I/17 C	2017/DSE/I/12 A (88%)
2019/DSE/I/21 B	<i>Note: Figures in brackets indicate the percentages of candidates choosing the correct answers.</i>			
1988/AL/I/2	2019/DSE/I/	D		

The marginal benefit (i.e. value) is the maximum a consumer is willing to pay for the last unit purchased. Errors aside, no maximizing individual will, on a voluntary basis, pay more than what he is willing to pay.

If price is lower than his marginal benefit, to maximise consumer surplus, the consumer will buy more until the price is equal to his marginal benefit. Therefore, at the margin, he will pay the maximum of what he is willing to pay, and price equals marginal benefit.

1989/AL/I/1

Price is a marginal benefit (i.e. the maximum an individual is willing to pay at the margin).

Price serves as a signaling device to direct resource allocation (i.e. allocative function); it also serves as a criterion of determining who wins or loses in competing for goods and services in the market place (i.e. rationing function).

1992/AL/I/6

The market price of the permits will definitely be higher than \$20, because in this market the criteria of drawing lottery will not be used, leaving the market price to measure fully the marginal benefit people place on the permit.

With the permits now going to those who offer the highest prices in the resale market, more goats will likely be killed. This is because the higher permit price implies that either the permit holders are better, more enthusiastic, or more frequent hunters who place a higher marginal benefit on hunting.

(Note: More goats would be killed not because permit holders wished to make compensation for the higher price, but because only better hunters were willing to pay a higher price to obtain the permits.)

1994/AL/I/8

No. The marginal cost of reproducing discs (legal or illegal) is much lower than the selling price. Since illegal copies are sold at a lower price, buyers can enjoy a greater consumer surplus. The marginal benefit is closer to the marginal cost, leading to a more efficient allocation of resources.

Yes. If reproduced discs are sold in the market, in an extreme case, the composers of the songs will not be able to receive any revenue from selling the original discs. There will be no more new songs and original discs in the future (and hence illegal reproduction), and no more consumer surplus and producer surplus in the future.

1997/AL/1/8(a)

When a student is required to pay a high tuition out of his own pocket to buy university education, his own marginal benefit on university education will also be high. He will therefore treasure education more, with the result that he would study harder than when he does not have to pay and put a low marginal benefit on education.

(Note: Whether students are willing to work harder or not depends on the price they have to pay for being lazy, as indicated by the law of demand. The 'price' here is the value of learning forgone.)

2002/AL/1/06(b)

Whoever pays for the purchase of the tunnel, the payment is a cost to society. If the government purchases the tunnel (tax money is a cost to society) and let all cars use it free of charge, there is no way of knowing the total benefit to the users will cover the purchasing cost of the tunnel, even if we ignore the cost of operation. Whether or not here is congestion makes no difference to this answer.

2006/AL/1/5

In a buffet dinner when a consumer eats until his marginal benefit reaches zero, lower than the marginal cost of producing food, we have an inefficient situation.

2006/AL/1/9

It does not mean ladies in mainland China are richer than those in Hong Kong. It only indicates that mainland ladies have a higher maximum willingness to pay for prestigious handbags. Such a higher marginal benefit could be a result of higher wealth or income, or other factors such as a lack of substitutes or consumer preference (e.g. due to culture or advertisement) favourable to these handbags.

Many ladies from China pay such high prices because they do care for famous or prestigious brand names and it is possible that mainland ladies in general have a higher preference for prestige.

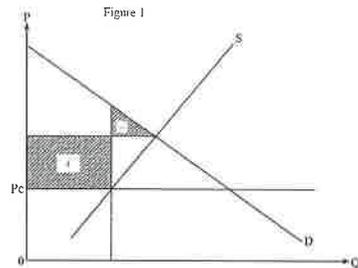
2009/AL/1/7(a)

The higher licence fees plus the higher travelling costs indicate that the cost per animal hunted is considerably higher for out-of-state hunters, so in general they would have to be better hunters to equate the marginal gain and marginal cost of hunting.

PP/DSE/1/4

(a) Deadweight loss is the loss in the total social surplus or the potential gains not fully captured when marginal benefit does not equal marginal cost. (2)

(b) (i) Yes. (1)



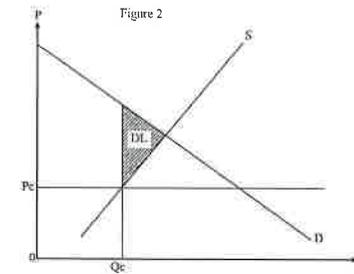
Indicate in the diagram:

- gain of consumer surplus (+)
- loss of consumer surplus (-)

(1)
(1)

PP/DSE/1/4

(b) (ii)



Indicate in the diagram:

- deadweight loss (DL)
- quantity is Q_e

(1)
(1)

Verbal elaboration:

No, because

when price is set below equilibrium, the quantity transacted will be reduced.

marginal cost of sellers is lower than marginal benefit of consumers / there is deadweight loss.

(1)
(1)
(1)

PP/DSE/1/12(b)(i)

Rationing function: Tickets were distributed to the buyers who were willing to pay at least \$200. (1)

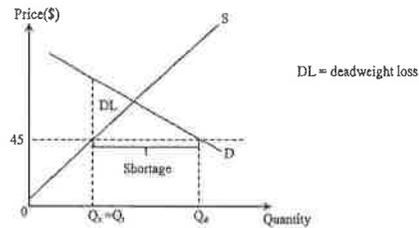
2015/DSE/1/4(a)

Allocative function: Higher prices of small-sized flats would induce real-estate developers to direct more resources towards the production of small flats.

OR

Signal function: Prices help transmit information about consumer demand relative to producer supply. (2)

2016/DSE/II/11
(b)



Illustrate in the diagram:

- price set below equilibrium
- correct position of Q_c
- correct position of deadweight loss

(1)
(1)
(1)

Verbal elaboration:

The price is set at \$45 which is below equilibrium.

(With the existence of shortage,) the quantity transacted is below equilibrium quantity or there is underproduction, the marginal benefit is larger than the marginal cost

(1)
(1)
(1)

(d) Efficiency.

The fee increase would improve efficiency as it results in a price closer to the equilibrium level, thus narrowing the gap between MB and MC and reducing the size of deadweight loss.

(2)

2019/DSE/II/11

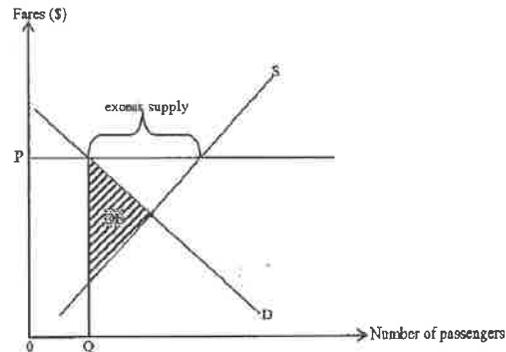
- (a) The launch of HSR will increase the geographical mobility of workers because the transportation network improves. (3)

- (b) Verbal elaboration:
Fares are set above the market-clearing (or equilibrium) level. So marginal benefit of train service is larger than marginal cost. (2)

Illustrate in the diagram:

- correct position of P and Q
- correct position of deadweight loss (DL)

(1)
(1)



SECTION 8: MARKET INTERVENTION

8(a) PRICE CONTROL

Multiple-Choice Questions

1. (1 mark)

Which of the following will result in a decrease of housing?

- A. There is an increase in population.
- B. There is an increase in the number of houses.
- C. The supply of housing is reduced.
- D. The government sets the price of housing below the market price.

2. (1 mark)

If the government imposes a price floor below the equilibrium price, there will be

- A. a decrease in the total revenue.
- B. a decrease in the quantity transacted.
- C. an excess supply.
- D. an excess demand.

3. (1 mark)

The below diagram shows the equilibrium quantity of Good X. The price increases from P_0 to P_1 after the price ceiling is removed. As a result, the total expenditure on Good X will



- A. decrease.
- B. increase.
- C. remain unchanged.
- D. either increase or decrease, depending on its price elasticity of demand.

4. (1 mark)

It is reported that the government has set a Hike Xmas increase minimum wage. This might lead to a rise in the wage rate and a reduction in Hong Kong. This would have a direct impact on the demand for Hike Xmas.

- A. The minimum wage will rise.
- B. The minimum wage will fall.
- C. The minimum wage will remain the same.
- D. A change will depend on the Hong Kong economy.