Issued On:		Past Paper Questions [PPQs]	**5** [57 - 61]
Deadline:		Model Questions [MQs]	**3** [19 - 21]
Marks : Time	**1 mark = 1 ½ Mnt**	Units - Essentials Covered	**Unit 2**

Structured Essay Type Question Answers:

[01] 2018 A/Ls (ECON – II): Q2 (III)

What is meant by **price elasticity of demand?** **[02 marks]**

The price elasticity of demand (PED) measures the sensitivity or responsiveness shown by quantity demanded of a given product, to a change in its price.

[01 mark]

Price elasticity of demand is estimated by dividing the percentage (or proportionate) change in quantity demand, by the percentage (or proportionate) change in price, inducing such change in quantity demanded. This can be estimated / expressed as follows.

$$\textbf{PED} = \frac{\textbf{Percentage Change in Quantity demanded}}{\textbf{Percentage Change in Price}}$$

PED is also known as 'Own Price Elasticity of Demand'

[01 marks] [Total 02 marks]

[02] 2016 A/Ls (ECON – II): Q2 (I - III)

(I) What factors determine the **price elasticity of demand** for a consumer good

(II) Why is a **downward sloping linear demand curve** more price elastic at higher prices ranges and more price inelastic at lower price ranges?

[04 marks each]

(III) Given the income elasticities of demand of the following goods, how would you classify the following goods as **'luxury'**, **'necessity'** and **'inferior'** goods?

a) Bottled water = 1.3
b) Cowpea = - 0.8
c) Bread = 0.5
d) Mobile phone = 1.8 **[01 mark each]**

(I)

- The abundance of substitute goods
- The percentage of consumers' income spent on the product
- The nature of the product under consideration, in terms of luxury good or necessity
- The definition of the product (The coverage of the definition, in terms of broad or narrow)
- The number of uses or utilities of the product
- The time lapsed (passed) after a change in price

[01 mark each, maximum 04 marks]

(II)

The point price elasticity of a downwards sloping linear demand curve is estimated using the following formula (point price elasticity of demand):

$$\text{Point PED} = \frac{\Delta Qd}{\Delta P} \times \frac{P}{Qd}$$

With regards to a linear demand curve as presented below, the first component of the point Price Elasticity of Demand (PED) formula, i.e. the slope or reciprocal of the slope of the demand curve. **Although the value of the slope (or reciprocal of slope) is constant,** the point **PED coefficient value tends to change from one point to another along a linear demand curve.**

This is because the price: quantity ratio or the second component of the point price elasticity of demand formula tends to change or vary along the curve. **Point PED coefficient value** will **gradually decrease** when **moving downwards from left to right along a traditional linear demand curve.**

[02 marks]

The principal reasons for this specific point PED coefficient behavior can be outlined as follows:

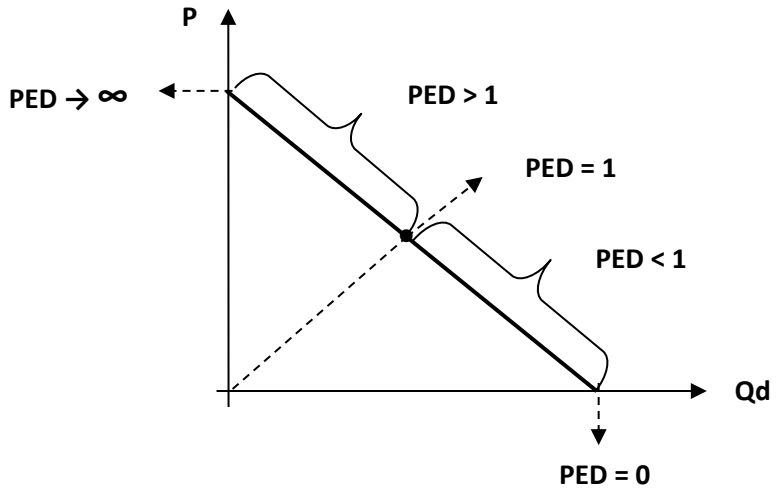
- At the higher or upper price range of a demand curve [top left region], the overall point PED coefficient value becomes a higher value (i.e. elastic), since price is high and quantity is low when moving downwards along the curve in this range.

- At the lower or bottom price range of a demand curve [bottom right region], the overall point PED coefficient value becomes a lower value (i.e. inelastic), since price is low and quantity is high when moving downwards along the curve in this range.

[01 mark each] [Total 04 marks]

Additional:

How the elasticity and the magnitude of the Point PED coefficient changes when moving along a standard downward slopping linear demand curve is illustrated in the following diagram.



(III)

e) Bottled water: Luxury Good
f) Cowpea: Inferior Good
g) Bread: Necessity
h) Mobile phone: Luxury Good

[01 mark each, Total 04 marks]

[03] 2011 A/Ls (ECON – II): Q2 (II)
Distinguish between a **'normal good'**, an **'inferior good'** and a **'Giffen good'**

[03 marks]

A normal good refers to any good for which the consumer <u>income</u> and <u>quantity demanded</u> relationship tends to be <u>positive or direct</u>.

[01 mark]

<u>Alternative Answer</u>

Normal goods are products where when consumer income increases the quantity demanded of such goods shall increase, and if income decreases the quantity demanded tends to decrease. These goods represent a ***positive income elasticity of demand coefficient.***

An inferior good refers to any product for which the consumer <u>income</u> and <u>quantity demanded</u> relationship tends to be <u>negative or indirect.</u>

[01 mark]

Alternative Answer

Inferior goods are products where when consumer income increases the quantity demanded of such goods shall decreases, and if income decreases the quantity demanded tends to increase. These goods represent a ***negative income elasticity of demand coefficient.***

A giffen good refers to any product for which the price and quantity demanded relationship tends to be positive or direct.

[01 mark]

Alternative Answer

Giffen goods are products where, when price increases the quantity demanded of such goods shall increase, and if price decreases the quantity demanded tends to decrease. These goods represent a ***positive price elasticity of demand coefficient.***

If the substitution effect caused by a change in the price of a given product is overweighed by the negative income effect of the price change (i.e. income effect works against the law of demand), the said product is a giffen good.

[Total 03 marks]

[04] Model Question

Price elasticity of demand and **law of demand** refer to similar concepts on account of the variables concerned; discuss this notion

[4 marks]

Price elasticity and Law of demand are **conceptually different**;

Price elasticity of demand measures the relative responsiveness of quantity demand to a change in price of a given product. Accordingly price elasticity of demand is the process of measuring and presenting the **percentage change** in **quantity demanded [%Δ Qd]** in response to a **percentage change** in **price [%Δ P]** of a given product, while all other **non-price factors** are **held constant**, at a given point of time.

[02 marks]

The law of demand represents the **negative or indirect** relationship between **price** [P] and **quantity demanded** [Qd], while all other or **non-price factors** affecting demand are **held constant** at a given point of time. In other words if price changes [ΔP], while non-price factors affecting demand are held constant; quantity demand shall change [ΔQd] in the opposite or indirect direction.

The **demand curve** for a **normal good** becomes **downwards sloping** from left to right and the **PED coefficient** value becomes **negative**, due to the **law of demand.**

[02 marks; Total 04 marks]

[05] Model Question

Discuss the relationship between **Price Elasticity of Supply** and **linear supply equation** using **supply curves**

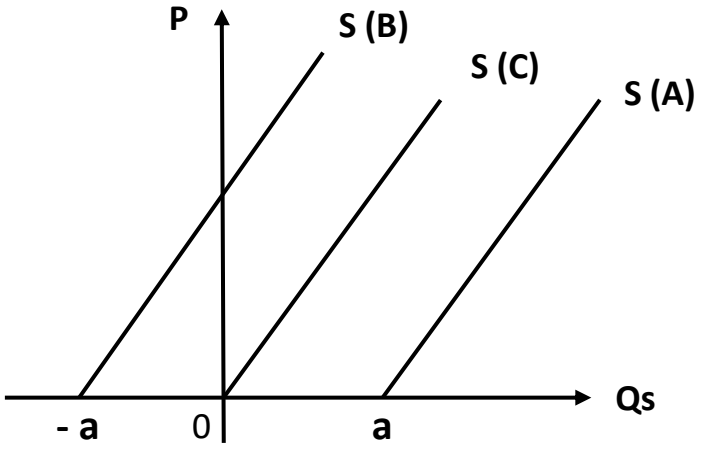
[03 marks]

The nature of PES with regards to a given product is **reflected** through the **linear supply equation;** specially based on the **horizontal intercept value** or the [a] component of the supply equation relevant to **traditional** linear supply curve [**Qs = a + bP**], i.e. depending on the quantity supplied at zero price.

(A) Relatively **Inelastic Supply** [PES < 1] - Qs = a + bP

(B) Relatively **Elastic Supply** [PES > 1] - Qs = **-**a + bP

(C) Unit Elastic Supply [PES = 1] - Qs = bP



[03 marks; Diagram essential]

[06] Model Question

Distinguish between **'Price Elasticity of Demand'** and **'Cross Elasticity of Demand'**

[04 marks]

Price elasticity of demand (PED) is the **percentage change** in **quantity demanded** given a **percent change** in the **price,** while **non-price factors** affecting demand are **held constant**. Price elasticity of demand is estimated using the following generic formula

[01 mark]

$$\text{Price elasticity of demand} = \frac{\text{Percentage change in quantity demanded}}{\text{Percentage change in price}}$$

[01 marks] [02 marks]

Cross elasticity of demand (XED) is the **percentage change** in **quantity demanded** of a given product (product under consideration) to a given **percent change** in the **price of a another product,** while **non-price factors** affecting demand are **held constant**. Cross elasticity of demand is estimated using the following generic formula

[01 mark]

$$XED = \frac{\text{Percentage change in Quantity demand of product (X)}}{\text{Percentage change in Price of product (Y)}} = \frac{\%\Delta Qdx}{\%\Delta Py}$$

[01 marks] [02 marks]
[Total 04 marks]

[07] 2005 A/Ls (ECON – I - II): Q3

The market demand supply functions for commodity sold in a competitive market are given below:

Qd = 20 – P (demand function) Qs = -8 + 6P (supply function)

(A) Determine the equilibrium price and quantity of this commodity
(B) Suppose demand function changes to Qd = 36 – 5P while the supply function remains unchanged. Determine the new equilibrium price and quantity
(C) Suppose supply function changes to Qs = -10 + 4P while the market function remains unchanged at its original level. What will be the new equilibrium price and quantity?

[04 marks each]

(D) Draw a diagram to show the conditions described in parts (A), (B) and (C)

[03 marks]

[01] 2005 A/Ls (ECON – I - II): Q3

(A)

Qd = Qd
20 – P = -8 + 6P
20 + 8 = 6P + 1P
28 = 7P
Therefore: P = 4

Ep: Rs. 4.00
Eq: 16 Units

P = 4
Qd = 20 - P
= 20 – (P*4)
= 16

P = 4
Qs = -8 + 6P
= -8 + (6*4)
= 16

[02 marks each]

(B)

Qd = Qd
36 – 5P = -8 + 6P
36 + 8 = 6P + 5P
44 = 11P
Therefore: P = 4

Ep: Rs. 4.00
Eq: 16 Units

P = 4
Qd = 36 - 5P
= 36 – (5*4)
= 16

P = 4
Qs = -8 + 6P
= -8 + (6*4)
= 16

[02 marks each]

(C)

Qd = Qd
20 – P = -10 + 4P
20 + 10 = P + 4P
30 = 5P
Therefore: P = 6

Ep: Rs. 6.00
Eq: 14 Units

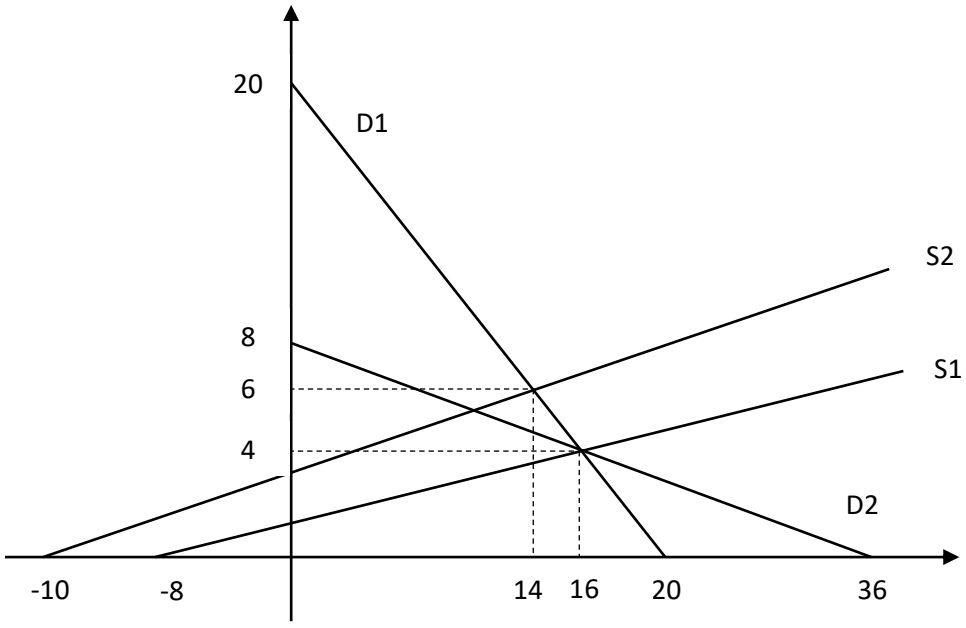
P = 6
Qd = 20 - P
= 20 – (P*6)
= 14

P = 6
Qs = -10 + 4P
= -10 + (4*6)
= 14

[02 marks each]

Note: The answers for parts (A), (B) and (C), alternatively can be derived using an equilibrium schedule or diagram.

(D)



Properly constructed diagram (on graph paper): **03 marks**

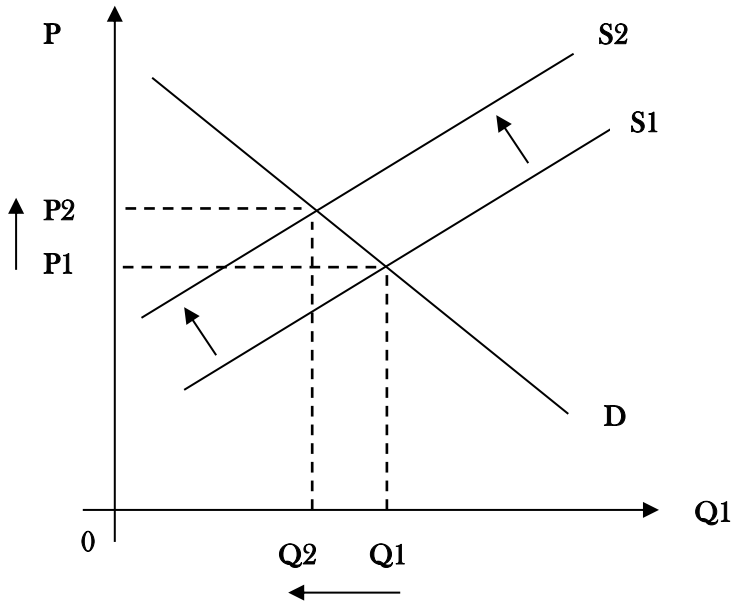
[08] 2005 A/Ls (ECON – I - II): Q4 (a)

Using relevant diagrams, explain the effects of the following events on the market for fish which is operating under competitive conditions

(I) Destruction of a substantial part of fishing vessels due to Tsunami waves
(II) A fall in consumer preference for fish
(III) A fall in the price of chicken
(IV) A payment of fuel subsidy to fishermen
(V) Major improvement in fishing technology with assistance from donor countries

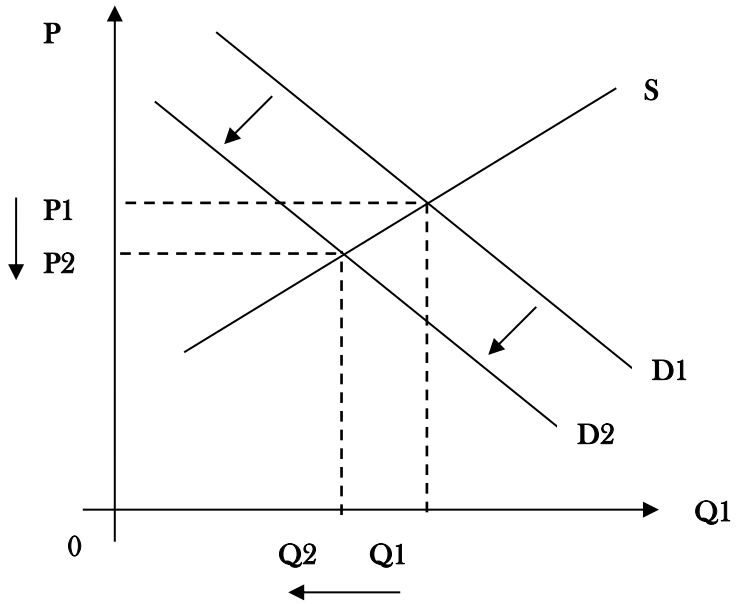
[02 marks each]

(I)



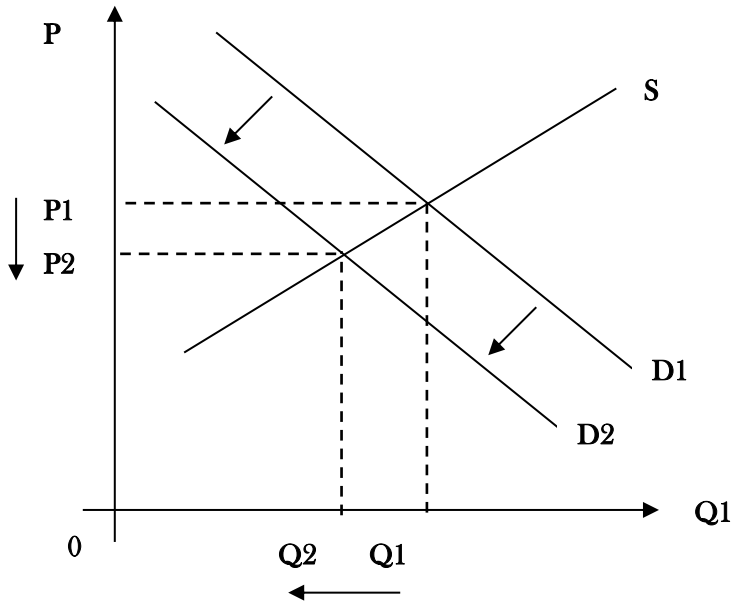
- The market supply curve will shift leftwards or decreases from (S1) to (S2)
- If other factors remain constant the market or equilibrium price increases from (P1) to (P2) and quantity decreases (Q1) to (Q2).

(II)



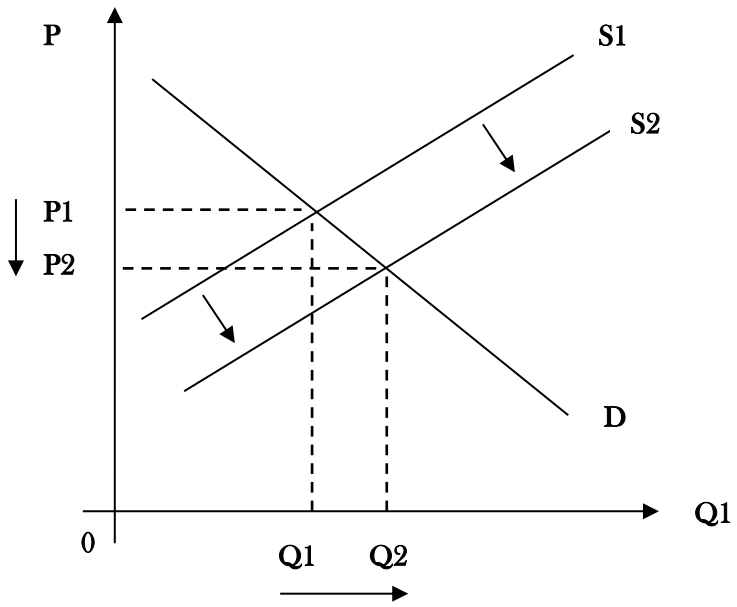
- The market demand curve will shift leftwards or decreases from (D1) to (D2)
- If other factors remain constant the market or equilibrium price decreases from (P1) to (P2) and quantity decreases (Q1) to (Q2).

(III)



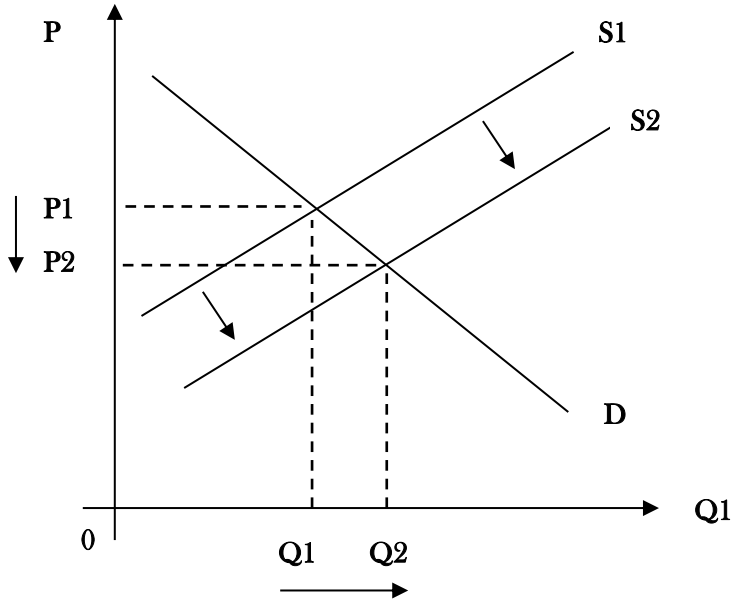
- The market demand curve will shift leftwards or decreases from (D1) to (D2)
- If other factors remain constant the market or equilibrium price decreases from (P1) to (P2) and quantity decreases (Q1) to (Q2).

(IV)



- The market demand curve will shift Rightwards or increases from (S1) to (S2)
- If other factors remain constant the market or equilibrium price decreases from (P1) to (P2) and quantity increases (Q1) to (Q2).

(V)



- The market demand curve will shift Rightwards or increases from (S1) to (S2)
- If other factors remain constant the market or equilibrium price decreases from (P1) to (P2) and quantity increases (Q1) to (Q2).

(02 mark for each situation, a maximum of 10 marks)

Answer Grid [MCQs]

Question	Answer	Question	Answer
01	1	11	5
02	5	12	1
03	3	13	5
04	4	14	2
05	4	15	4
06	3	16	1
07	2	17	3
08	2	18	5
09	1	19	2
10	3	20	4
		21	4
		22	3
		23	1
		24	5
		25	1

Answer Grid [OTQs]

Question	Answer	Question	Answer
01	True	06	True
02	False	07	True
03	False	08	True
04	False	09	True
05	False	10	True

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Hope you have been proactive and smart enough to have attempted the SEQs from these PAs **'Pen on Paper'**