**Quick Answers**

*Question 1*

**Discuss whether or not demand for cars will become more price-elastic in the future.**

**Level 3 (6-8 marks)**

A reasoned discussion which accurately examines both sides of the economic argument, making use of economic information and clear and logical analysis to evaluate economic issues and situations. One side of the argument may have more depth than the other, but overall both sides of the argument are considered and developed. There is thoughtful evaluation of economic concepts, terminology, information and/or data appropriate to the question. The discussion may also point out the possible uncertainties of alternative decisions and outcomes

**Why it might:**

- may be closer substitutes. Price of public transport and /or quality of public transport may fall making them closer substitutes

- may take up a larger proportion of income. Incomes may fall

- price may rise. Demand becomes more price elastic as price rises

- the number of firms producing certain types of cars may increase

- time will give consumers more opportunity to search out lower prices

**Why it might not:**

- may become more of a necessity. People may work further from where they live

- may become easier to postpone purchase. If cars last longer, consumers may be able to delay buying replacements

- people may have become used to driving – habit forming. May be reluctant not to own and drive a car

- price of complements may rise, so that even if price of cars fall, people may not buy more cars

*Question 2*

**Explain what effect more firms producing tyres would have on the PED of individual firms' tyres.**

- Will increase competition (1) more substitutes will be available (1) a rise in the price of one firm's tyres would cause people to switch to other firms' tyres (1) demand would become more elastic (1)

**Guidance**

- Accept a diagram as an alternative to the last mark

## Question 3

**State the formula used to calculate PED.**

- % change in quantity demanded divided by % change in price (2)

- Change in demand divided by change in price (1)

## Question 4

**Discuss whether or not increasing sales of a product will be beneficial to a firm.**

**Up to 5 marks why it will be:**

- Increase sales revenue/income (1) increase profits (1) allowing firm to reinvest (1) into R&D (1) employ more labour (1) making new products (1) better quality products (1) profits increase even more (1)

- Revenue may increase if PED is elastic (1) as demand will rise by a greater proportion than price (1)

- Economies of scale (1) as output increases and average cost falls (1) efficiency arising from bulk buying / lower interest rates / indivisibility / division of labour (1)

**Up to 5 marks why it will not be:**

- Price might be lower (1) revenue is lower (1) profit is lower (1) sales of product increase but sales of other products decrease (1) not enough to offset each other (1)

- Extra sales only achieved through higher costs of production (1) e.g. advertising (1)

- Diseconomies of scale (1) increase output and average costs increases (1) due to control and coordination problems (1)

## Question 5

**Analyse, using Fig.1.1, the relationship between copper output and revenue from the sale of copper.**

**Expected relationship** - a direct relationship would have been expected / moved in same direction / as copper output rose, revenue should have risen (1).

**Evidence** in support of **unexpected** relationship

- Does not support expected relationship / shows an inverse relationship (1).

- Between 2010–14 revenue rose (from 100 to 128) but output fell (from 100 to 90) so prices rose (1).

- Between 2014–17 revenue fell (from128 to 90) but output rose (from 90 to 108) which meant that prices fell (1).

- In 2014 copper revenue was highest 128 and output at its lowest 90, while in 2017 copper revenue was at its lowest 90 and output at its highest 108, so changes in revenue were greater than changes in output of copper (1).

**Analysis of inverse relationship:**

- When output fell, price per unit may have risen more than fall in output, due to loss of economies of scale causing average costs to rise (1).

- Price for Zambian copper affected by world market prices (1).

- Copper is likely to be inelastic in demand so prices rise by more than fall in output increasing revenue (1).

**Guidance**

A **pattern of analysis** is expected in response to this type of question.

Do not reward simple statements (repetition) of the figures given in the table.

## Question 6

**Explain two reasons why demand for a product may be price-inelastic.**

- The product may not have a substitute (1) consumers will not be able to switch to rival products / example (1).

- The product may be a necessity (1) people will need to buy it even if price rises / example (1).

- The product may take up a small proportion of income (1) people may not notice a price rise / example (1).

- The product may be addictive (1) people cannot do without the product / example (1).

- The purchase of the product cannot be postponed/there is only a short time period (1) so people do not have time to find alternatives (1).

- Advertising changes tastes of consumer (1) making the product a "must have" (1).

## Question 7

**Analyse how a change in the PED for its products may benefit a firm.**

- A more elastic demand (1) would mean that the firm could raise revenue (1) by lowering price (1) profit would rise (1) if revenue rises by more than costs (1).

- A more inelastic demand (1) would mean the firm could raise revenue (1) by raising price (1) profit would rise (1) if a lower output increases the gap between revenue and cost (1).

**Guidance**

- No marks for a definition of PED

- Allow one mark for explanation of elastic demand and one mark for explanation of inelastic demand

- Analysis of change in elasticity of demand is required

## Question 8

**Explain, using information from the extract, whether demand for Indian tractors was price-elastic or price-inelastic in 2015.**

Inelastic (1) price and revenue moved in the same direction (1).

## Question 9

**Analyse how information on changes in a firm's revenue can be obtained from price elasticity of demand calculations.**

- PED definition or formula (1) PED provides information on how consumers react to a change in price (1)

- If PED is elastic / PED > 1, a fall in price will raise revenue (1) as quantity demanded will increase more (1) than proportionately/percentage (1). A rise in price will decrease revenue (1) as quantity demanded will decrease more than proportionately (1)

- If PED is inelastic / PED < 1, a rise in price will raise revenue (1) as quantity demanded will decrease less (1) than proportionately / percentage (1). A fall in price will decrease revenue (1) as quantity demanded will increase less than proportionately (1)

- If PED is perfectly elastic, a rise in price will cause revenue to fall to 0 (1) as consumers will stop buying completely (1)
  If PED is perfectly inelastic / PED = 0, a rise in price will raise revenue (1) as consumers will continue to buy the same amount (1)

- If PED has unit elasticity / PED = 1, a change in price will keep revenue unchanged (1) as quantity demanded will change by the same proportion (1)

**Guidance**

- Maximum 4 marks for reference to only elastic OR inelastic

## Question 10

**Analyse how price elasticity of demand for a product influences the revenue a firm receives**

- Formula or definition of PED (1)

- If demand is elastic, a rise in price will cause a fall in revenue (1) because the quantity demanded will fall by more than the rise in price (1) in percentage terms (1) example of type of product with elastic demand e.g. a luxury (1)

- If demand is inelastic, a rise in price will cause a rise in revenue (1) because the quantity demanded will fall by less than the rise in price (1) in percentage terms (1) example of a product with inelastic demand e.g. one without a substitute (1)

- If demand is perfectly inelastic, a rise in price will cause an equally proportionate rise in revenue (1) because the quantity demanded will not change (1)

- If demand is perfectly elastic, a rise in price will cause revenue to fall to zero (1) because people will stop buying the product (1)

- If demand is unitary, a rise in price will leave total revenue unchanged (1) as the proportionate change in quantity demanded and price will be the same (1)

**Guidance**

- Accept as reasons why demand may be price-elastic, availability of substitutes and why demand may be price-inelastic, lack of substitutes.

## Question 11

**Calculate, using the information in the extract, the price elasticity of demand for water.**

PED = (–) 0.07 (2)
Correct working –0.7% / 10% or –0.07% or 0.7 (1)

## Question 12

**Discuss whether or not private firms supplying water should increase their prices.**

**Up to 3 marks for why they should:**