

AS ECONOMICS 7135/1

Paper 1 The operation of markets and market failure

Specimen 2014

Morning

Time allowed: 1 hour 30 minutes

Materials

For this paper you must have:

- the source booklet
- the use of a calculator.

Instructions

- Use a black ball-point pen. Do **not** use pencil.
- Answer **all** questions in **Section A**.
- Answer **EITHER** Context 1 **OR** Context 2 in **Section B**.
- You will need to refer to the source booklet provided to answer **Section B**.
- Do all rough work in this answer book. Cross through any work you do not want to be marked.
- You must answer the question in the spaces provided. Do not write outside the box around each page or on blank pages.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 70.
- No deductions will be made for wrong answers.

Please write clearly, in block capitals, to allow character computer recognition.

Centre number Candidate number

Surname

Forename(s)

Candidate signature _____

Section A

Answer **all** questions in this section

Only **one** answer per question is allowed.

For each answer completely fill in the lozenge alongside the appropriate answer.

CORRECT METHOD WRONG METHODS

If you want to change your answer you must cross out your original answer as shown. 

If you wish to return to an answer previously crossed out, ring the answer you now wish to select as shown. 

0 1

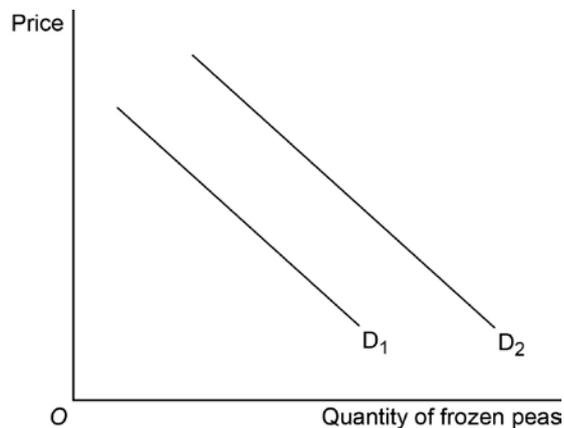
Diseconomies of scale occur when

- A average cost falls due to the growth of a firm.
- B average cost rises due to a firm reducing its output.
- C total cost rises due to the growth of a firm.
- D average cost rises due to the growth of a firm.

[1 mark]

0 2

The diagram below shows two demand curves for frozen peas.



The diagram shows that, all other things being equal, the shift of the demand curve for frozen peas from D_1 to D_2 can result from

- A an increase in the quantity of frozen peas supplied.
- B an increase in the price of frozen peas.
- C a change in consumer preference for frozen peas.
- D a decrease in the price of a substitute for frozen peas.

[1 mark]

0 3

A key distinction between merit goods and demerit goods is that

- A the consumption of merit goods usually gives rise to positive externalities and not negative externalities.
- B in a free market demerit goods will be under-consumed but merit goods will be over-consumed.
- C merit goods have to be provided by the government but demerit goods do not.
- D demerit goods are an example of market failure but merit goods are not.

[1 mark]**0 4**

A profit-maximising firm with market power is most likely to use that market power to

- A improve the allocation of resources.
- B charge higher prices than firms with little market power.
- C charge customers for its negative externalities in production.
- D increase the elasticity of its supply curve.

[1 mark]**0 5**

If demand for a product is unit elastic, for a given percentage increase in price, total revenue will

- A rise by the same percentage.
- B rise by a smaller percentage.
- C fall by the same percentage.
- D remain unchanged.

[1 mark]

0 6

The table below shows the production possibilities for a firm producing butter and cheese.

| Output of butter (million kilos) | Output of cheese (million kilos) |
|-------------------------------------|-------------------------------------|
| 0 | 100 |
| 1 | 90 |
| 2 | 70 |
| 3 | 40 |
| 4 | 0 |

It can be concluded from the table that, as production of butter increases, the opportunity cost of such production, in terms of cheese

A remains constant.

B falls.

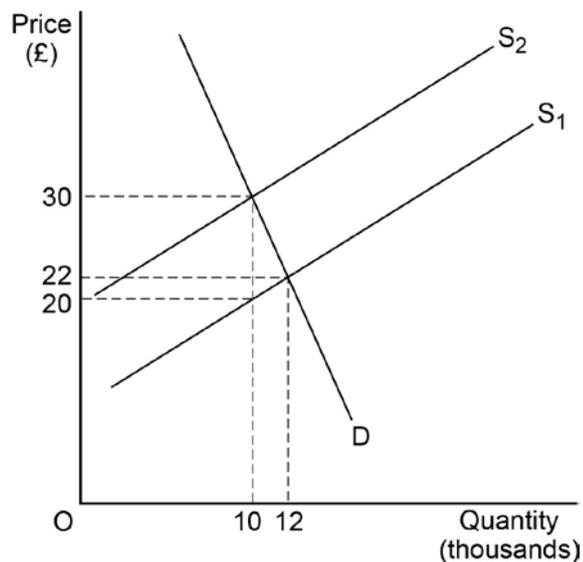
C rises.

D rises and then falls.

[1 mark]

0 7

The diagram below shows the market demand and supply curves and the market equilibrium both before and after an indirect tax is applied to a good.



According to the diagram, the revenue the government collects from this tax is

A £300 000

B £200 000

C £100 000

D £80 000

[1 mark]

0 8

Which one of the following is most likely to make a market more competitive?

- A An increase in the cost of equipment used in the production process.
- B The development of a successful new product by the largest firm in the market.
- C An increase in the degree of concentration in the market.
- D The removal of legal barriers to entry into the market.

[1 mark]

0 9

A supermarket reduces the price of tins of biscuits from £4 to £3 per tin. Subsequently, the sales increase from 200 to 300 tins of biscuits per day. The price elasticity of demand is

- A -2.0
- B -1.0
- C -0.50
- D -0.25

[1 mark]

1 0

Which one of the following statements about money and specialisation is correct?

- A Money can be used only in markets where there is specialisation in production.
- B Money is used as a medium of exchange which aids specialisation.
- C Greater specialisation is likely to lead to a reduction in the use of money in a market.
- D The use of money benefits workers more than consumers because of specialisation.

[1 mark]

1 1

The table below shows the value of income elasticities of demand for three goods, X, Y and Z, over a period of time.

| Good | Income elasticity of demand |
|------|-----------------------------|
| X | +2.0 |
| Y | +0.2 |
| Z | -1.9 |

From the data in the table, it may be concluded that an increase in consumer income would lead to

- A a decrease in demand for Good Z only.
- B an increase in demand for all three goods.
- C a more than proportionate increase in demand for Good Y.
- D an equal percentage increase in demand for Good X.

[1 mark]

1 2

Which one of the following is the reason why public goods are supplied by the government?

- A Sellers of the good or service are unable to prevent consumers from enjoying its benefits without payment.
- B Producers demand a higher price than some members of the public are prepared to pay.
- C Only governments have the technical knowledge required to produce public goods and services.
- D They can only be produced by a monopoly firm to prevent competition from rival suppliers.

[1 mark]

1 3

Price elasticity of supply in an industry is likely to be elastic when

- A firms have limited stocks of raw materials.
- B there are high barriers to entry into the industry.
- C production involves the use of highly skilled labour.
- D firms are operating below full capacity.

[1 mark]

1 4

Which one of these is a function of the market mechanism?

- A Maintaining stable prices between different markets.
- B Eliminating shortages of goods by allowing market prices to fall.
- C Achieving an equitable distribution of scarce resources.
- D Providing incentives for firms to provide goods to make a profit.

[1 mark]

1 5

The table below shows how the total output of a factory changes as the number of workers employed changes.

| Total output (in units) | Number of workers |
|-------------------------|-------------------|
| 1000 | 100 |
| 2500 | 200 |
| 6000 | 300 |
| 7000 | 400 |
| 8000 | 500 |

Referring to the data in the table, what happens to labour productivity as the number of workers increases from 100 to 500? Labour productivity

- A remains constant.
- B falls over the whole range.
- C rises at first and then falls.
- D falls at first and then rises.

[1 mark]

1 6

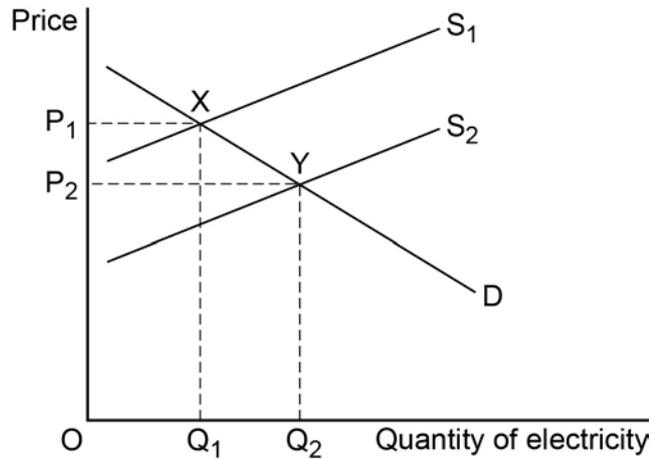
Which one of the following is a positive economic statement?

- A The pattern of wealth ownership in the UK is unfair.
- B There are too many poor people in the UK today.
- C The distribution of income in the UK is unequal.
- D The rich should be taxed more than the poor.

[1 mark]

1 7

The diagram below shows the demand and supply curves for an energy company which sells electricity produced using renewable sources.



Which one of the following will shift the market equilibrium position from X to Y?

- A More consumers buying electricity.
- B A government subsidy paid to the company.
- C An environmental tax levied on the company.
- D An increase in wages of workers in the electricity sector.

[1 mark]

1 8

The basic model of monopoly suggests inefficiency and a misallocation of resources. This could be explained by monopolists

- A producing goods and services which match people's needs and preferences.
- B using their profits to finance invention and innovation.
- C having production facilities of a large size, hence obtaining economies of scale.
- D charging higher prices than in competitive markets.

[1 mark]

1 9

The table below shows the world beer market share (%) by volume for brewing companies.

| Company | Market share (%) |
|-----------------|------------------|
| AB InBev | 22 |
| SABMiller | 13 |
| Heineken | 9 |
| Carlsberg | 7 |
| Molson Coors | 3 |
| Grupo Modelo | 3 |
| Tsingtao | 3 |
| Beijing Yanjing | 2 |
| FEMSA | 2 |
| Other | 36 |
| Total | 100 |

From the data in the table, what is the eight-firm concentration ratio?

A 57%

B 60%

C 62%

D 64%

[1 mark]

2 0

In the table below, all other things being equal, which combination of factors **A**, **B**, **C** or **D** is most likely to enable a firm in a competitive market to increase its market share?

| | Price elasticity of demand for firm's product | Firm's degree of product differentiation | Firm's long run average cost subject to | |
|---|-----------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------|
| A | High | Low | Diseconomies of scale | <input type="radio"/> |
| B | Low | High | Diseconomies of scale | <input type="radio"/> |
| C | High | High | Economies of scale | <input type="radio"/> |
| D | Low | Low | Economies of scale | <input type="radio"/> |

[1 mark]

**QUESTION 20 IS THE LAST
QUESTION IN SECTION A**

| | |
|---|---|
| 2 | 2 |
|---|---|

Extract B (line 2) states that spending on food by low-income families ‘forms a significant part of their total weekly spend.’

Calculate the income elasticity of demand for food if an increase in income from £25 000 to £30 000 leads to an increase in the quantity demanded of food of 10%.

[4 marks]

| | |
|---|---|
| 2 | 3 |
|---|---|

Using **Extract A**, identify **two** significant points of comparison between the changes in the index of average disposable income and the changes in the index of food prices over the period shown.

[4 marks]

Comparison 1

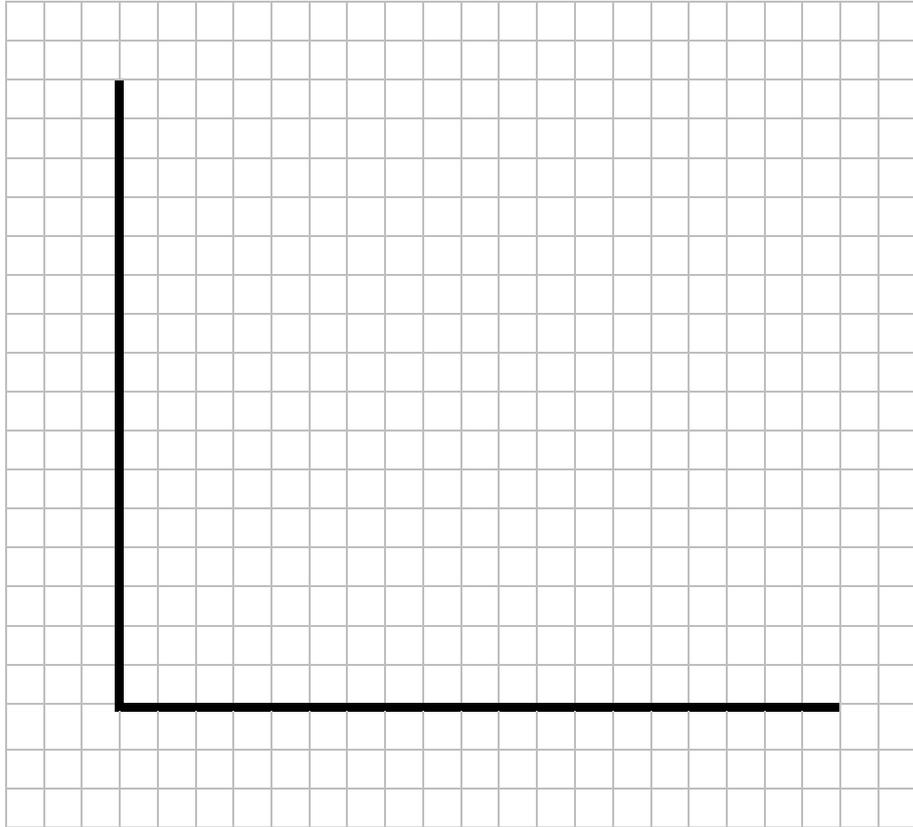
Comparison 2

| | |
|---|---|
| 2 | 4 |
|---|---|

In **Extract B** (line 11) it states that a spokesperson for the Food Ethics Council charity recently claimed that 'cheap food' is often an inferior good.

Draw a supply and demand diagram showing the effects of an increase in income on the price and quantity sold of an inferior good.

[4 marks]



Do **not** answer Context 2 if you have answered Context 1.

OR

Context 2

Total for this Context: 50 marks

COMMODITY PRICES

Using the provided source booklet, study **questions 27 to 32** and **Extracts D, E and F** and then answer the questions in the spaces which follow.

| | |
|----------|----------|
| 2 | 7 |
|----------|----------|

Define 'monopoly' (**Extract E**, line 4).

[3 marks]

Extra space

2 8

Extract E (line 6–7) states that ‘the price of potash is expected to fall from around \$400 to \$300 per tonne by the end of 2013.’

Calculate the price elasticity of demand for potash if this fall in price leads to an increase in the quantity demanded of 10%.

[4 marks]

2 9

Using **Extract D**, identify **two** significant points of comparison between the changes in the price of potash and the changes in the price of crude oil over the period shown.

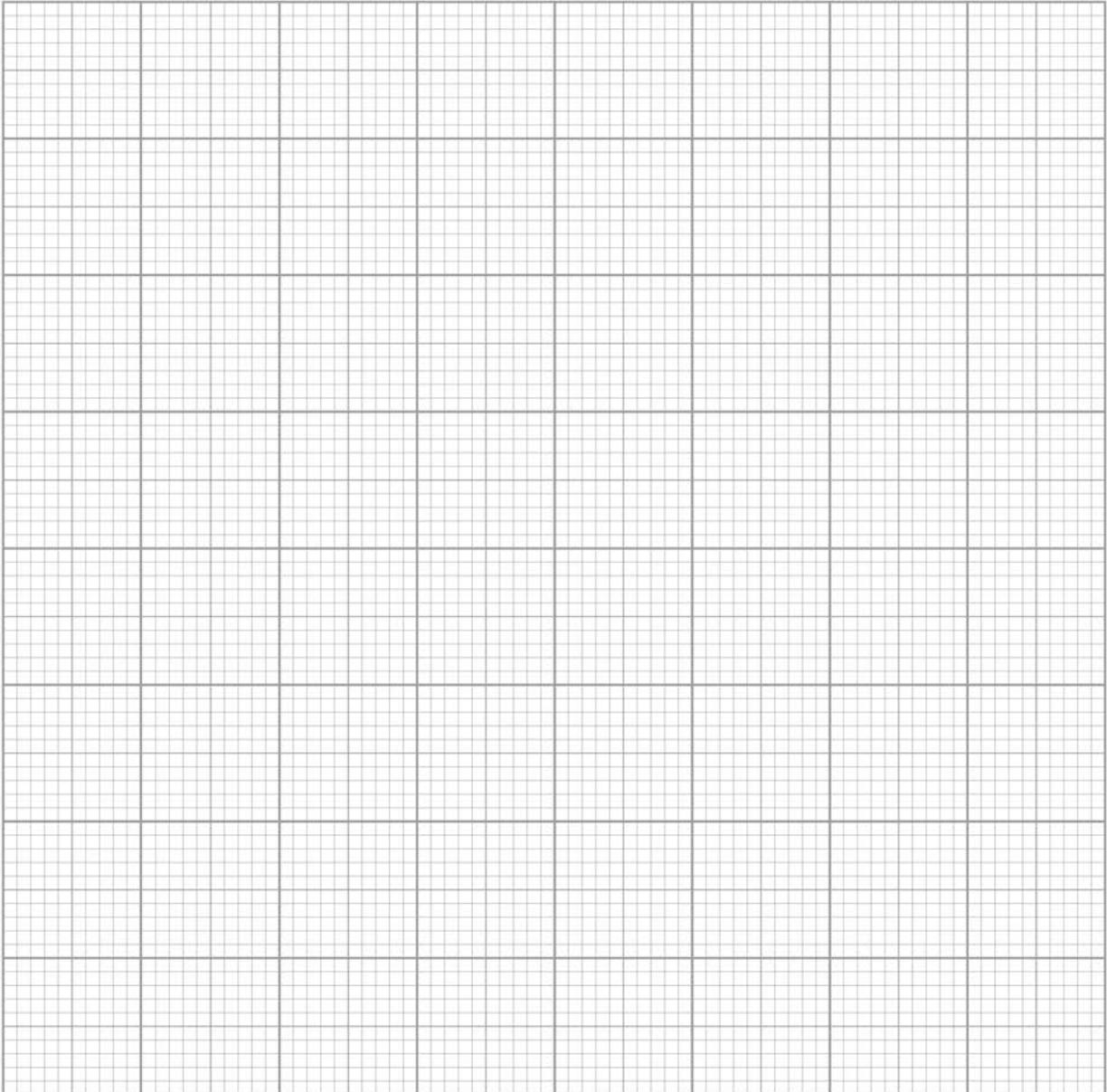
[4 marks]

Comparison 1

Comparison 2

3 0

Using **Extract D**, draw a bar chart to show the average monthly price of potash in the years 2009 to 2013.

[4 marks]

END OF QUESTIONS

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AS ECONOMICS 7135/1

Paper 1 The operation of markets and market failure

Source booklet

DO NOT WRITE ANY ANSWERS IN THIS SOURCE BOOKLET. YOU MUST ANSWER THE QUESTIONS IN THE PROVIDED ANSWER BOOKLET.

Context 1 Free school meals

Questions 21 to 26

- Extract A: Index of average household disposable income, and index of food prices, in the UK 2008 to 2012
- Extract B: The rising cost of food
- Extract C: There's no such thing as a free lunch

Context 2 Commodity prices

Questions 27 to 32

- Extract D: Average monthly world prices of potash and crude oil, January 2009 to September 2013
- Extract E: Competition in the potash market
- Extract F: Commodities markets: should governments intervene?

Context 1

Total for this Context: 50 marks

FREE SCHOOL MEALS

Extract A: Index of average household disposable income, and index of food prices, in the UK 2008 to 2012 (2008 = 100)

| Year | Disposable income | Food prices |
|------|-------------------|-------------|
| 2008 | 100 | 100 |
| 2009 | 102 | 106 |
| 2010 | 105 | 109 |
| 2011 | 110 | 114 |
| 2012 | 108 | 118 |

Note: All figures are rounded

Source: Official statistics, October 2013

Extract B: The rising cost of food

In recent years, food prices have risen faster than incomes, making it harder for many low-income families to buy food which forms a significant part of their total weekly spend. On average, 11.3% of household income was spent on food in 2011, up from 10.5% in 2007. However, for the poorest 20% of households, their spending on food rose from 15.2% to 16.6% in the same period. Record numbers of people are using 'food banks', where charities provide emergency food to those struggling to feed themselves and their families.

Food prices have been rising for a number of reasons, including climate change and population growth. A spokesperson for the Food Ethics Council charity recently called for food businesses and the Government to tackle the issue of making healthy food affordable, claiming that 'cheap food', which is often an inferior good, was causing problems for health and the environment.

Many low-income households are already buying so-called 'value' products, so can't switch to cheaper brands. They are also less likely to buy ethical products such as free-range eggs. Between 2007 and 2011, the poorest households have cut spending on fruit by 15% and vegetables by 12%, yet their spending on sweets rose by 5%. In 2011, 62% of adults in England were either obese or overweight, whilst 1 in 20 children has no fruit or vegetables in their diet.

The cost of treating illnesses caused by bad diet is £6 billion per year. Considerable amounts of food are wasted each year, much of which is not used in time, bread being the most wasted food. And although much more food waste is being recycled, some still ends up in scarce landfill waste sites. These externalities cannot be ignored.

Source: News Reports; October 2013

Turn Over for Extract C

Extract C: There's no such thing as a free lunch

It has recently been announced that from September 2014, all infant school children in England will receive free school lunches. On average, this will save parents over £400 a year and maybe more, if it leads to them spending less on evening meals. 1

At present, free school meals are only available to those on low incomes but children do not receive them unless they are claimed. In a trial scheme, where all primary school children were given free lunches, the take-up rose from roughly 50% in both areas to 72% in one and 85% in the other. 5

Those in favour claim that children will receive 'proper food', with improvements in concentration and behaviour leading to better academic achievement and health. As well as the private benefits, there will be considerable external benefits. Some would argue that the scheme should be extended to all school children. 10

Critics argue that the £600 million a year will be subsidising children from well-off families and would be better spent on other areas or to directly support children from low-income families. And how will it be funded?

When announcing the scheme, the Deputy Prime Minister, Nick Clegg stated: "Free school meals will help give every child the chance in life they deserve, building a stronger economy and a fairer society." 15

Source: News Reports; October 2013

Turn over for Context 1 questions

Context 1 - Questions 21 to 26

2 | 1

Define the term 'externalities' (**Extract B**, line 22).

[3 marks]

2 | 2

Extract B (line 2) states that spending on food by low-income families 'forms a significant part of their total weekly spend.'

Calculate the income elasticity of demand for food if an increase in income from £25 000 to £30 000 leads to an increase in the quantity demanded of food of 10%.

[4 marks]

2 | 3

Using **Extract A**, identify **two** significant points of comparison between the changes in the index of average disposable income and the changes in the index of food prices over the period shown.

[4 marks]

2 | 4

In **Extract B** (line 11) it states that a spokesperson for the Food Ethics Council charity recently claimed that 'cheap food' is often an inferior good.

Draw a supply and demand diagram showing the effects of an increase in income on the price and quantity sold of an inferior good.

[4 marks]

2 | 5

Extract B (line 1) states that 'In recent years, food prices have risen faster than incomes'.

Explain **two** possible reasons, **other than a change in income**, for the rise in the price of food over the period shown.

[10 marks]

2 | 6

Extract C (lines 15–17) states that 'Free school meals will help give every child the chance in life they deserve, building a stronger economy and a fairer society.'

Using the data in the extracts and your economic knowledge, assess whether the government should provide free school meals for all, some or no school children.

[25 marks]

Turn over for Context 2

Context 2

Total for this Context: 50 marks

COMMODITY PRICES

Extract D: Average monthly world prices of potash and crude oil, January 2009 to September 2013

| Year | Potash average monthly price, US\$ per tonne | Crude oil average monthly price, US\$ per barrel |
|------|----------------------------------------------|--------------------------------------------------|
| 2009 | 630 | 62 |
| 2010 | 330 | 80 |
| 2011 | 440 | 111 |
| 2012 | 460 | 112 |
| 2013 | 390 | 109 |

Source: Official statistics, October 2013

Notes: The 2013 figures are the average monthly prices for the nine months to September. All figures are rounded.

Extract E: Competition in the potash market

Potash is one of three main fertiliser products which farmers use to increase their output before planting crops such as wheat. Potash is an important natural resource, but for many years, the majority of the world's potash has been sold through two companies, which set the same prices. The companies effectively worked together as a monopoly. 1

However, it has recently been announced that the arrangement between these two companies has ended. As a result, the price of potash is expected to fall from around \$400 to \$300 per tonne by the end of 2013. It has been estimated that this would cut total costs by 3% an acre for many producers. This is good news for farmers and it could also lead to lower food prices in the supermarkets. 5

The fall in potash prices is in contrast to the situation in the first decade of this century, during which prices tripled, partly due to higher demand in China and India. Although this encouraged an increased supply, the higher price made the product less affordable, particularly in India, where the government had also cut farming subsidies. 10

Although prices may now fall in the short term, this may not last due to continued population growth and changing patterns in the demand for food. However, with more competition between firms, there should be some gains for buyers, at least for a while. 15

Source: News reports, October 2013

Extract F: Commodities markets: should governments intervene?

Oil is another commodity where suppliers have worked together to control prices. The Organization of the Petroleum Exporting Countries (OPEC), a group of 12 major oil-producing countries, has managed the supply of oil for over 50 years to try to control the price. 1

This has reduced fluctuations in price for both producing and consuming countries, although when producers work together, the price tends to be higher than it would be if there was more competition. 5

One effect of high oil prices is to encourage the development of other sources of energy. 'Fracking' involves obtaining gas or oil from shale rock using large quantities of water. There is considerable use of fracking in the US but there are environmental concerns, including air, water and noise pollution. Some countries have banned the technique. There are large reserves of shale gas in the UK and a firm has undertaken work to explore the possibility of fracking at a site recently. However, firms will need a licence if they are to be allowed to begin this type of work in future. 10

Commodities are vital as the raw materials and energy sources to make finished products. Should market forces be left to determine the price and output of these commodities or should governments intervene, and if so, which policies are most appropriate? Does it matter if sellers with considerable market power set the price, particularly when commodity prices may change frequently otherwise? 15

Source: News reports, October 2013

Turn over for Context 2 questions

Context 2 - Questions 27 to 32

2 7

Define 'monopoly' (**Extract E**, line 4).

[3 marks]

2 8

Extract E (line 6–7) states that 'the price of potash is expected to fall from around \$400 to \$300 per tonne by the end of 2013.'

Calculate the price elasticity of demand for potash if this fall in price leads to an increase in the quantity demanded of 10%.

[4 marks]

2 9

Using **Extract D**, identify **two** significant points of comparison between the changes in the price of potash and the changes in the price of crude oil over the period shown.

[4 marks]

3 0

Using **Extract D**, draw a bar chart to show the average monthly price of potash in the years 2009 to 2013.

[4 marks]

3 1

Extract E (lines 1–2), states 'Potash is one of three main fertiliser products which farmers use to increase their output before planting crops such as wheat.'

Explain the possible effects on the market for wheat of a fall in the price of a fertiliser such as potash.

[10 marks]

3 2

Extract F (lines 15–16) states that 'Commodities are vital as the raw materials and energy sources to make finished products.'

Using the data in the extracts and your economic knowledge, assess whether market forces should be left to determine the price of commodities such as potash, oil and gas.

[25 marks]

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Extract A: Official statistics, October 2013

Extract B: News Reports; October 2013

Extract C: News Reports; October 2013

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Extract D: Official statistics, October 2013

Extract E: News Reports; October 2013

Extract F: News Reports; October 2013