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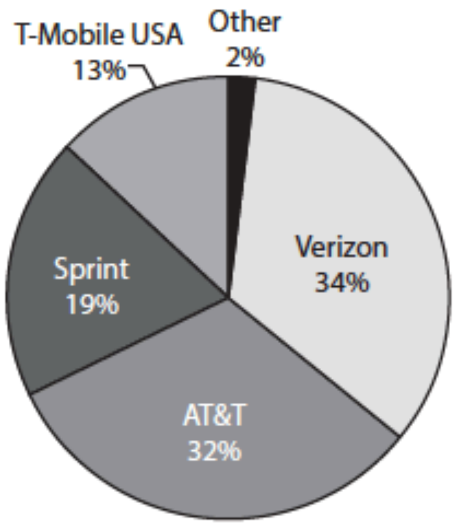
Oligopoly MC Questions

GCE A-LEVEL ECONOMICS

5 The diagram shows the market share of the cell [mobile] phone market in the USA.



In August 2014, after a failed attempt at a merger, a price war broke out between T-Mobile USA and Sprint. Under which market conditions are such price wars most likely to occur?

(1)

A Monopolistic competition in the short run

B Monopolistic competition in the long run

C Markets where there is a low concentration ratio

D A low degree of interdependence between firms

E Oligopoly

Explanation

(3)

Answer ☐

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Question Number	Answer	Mark
5	Key: E	**(1)**
	Oligopoly definition, e.g. a few firms dominate the industry (1) Interdependence (1) Explanation of a price war, e.g. firms react to another firm's price cuts by cutting their own prices (1) Use of data to demonstrate that some firms dominate, e.g. Verizon has 34%, or use of a concentration ratio e.g. the 4-firm CR is 98% (1) Reasons why a price war is likely to occur (1+1). This might be developed using game theory: Use of pay off matrix to show short term reasons for a price war e.g. short term gains by under-cutting rival (1) and the effect, e.g. both firms lose revenue(1) Kinked demand curve (1) if interrupted MR curve is illustrated (1) Knock out of D: if (kinked) demand were relatively inelastic in relation to a price cut then this would be a reason NOT to lower price (1)	**(3)**

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5 Supermarkets selling freshly baked bread are operating in an oligopoly. They tend to keep prices stable for a popular, frequently compared product, an 800 gram white loaf. One reason for this might be

(1)

A supermarkets know that the pricing decisions of one supermarket will impact on those of other supermarkets

B supermarkets are independent and base their prices on costs alone

C there is heavy regulation in the industry to prevent tacit collusion

D supermarkets are unable to engage in non-price competition

E if prices were cut by one supermarket then the others would leave prices unchanged

Answer ☐

Explanation

(3)

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Question Number	Answer	Mark
5	**Correct Option A (1 mark)** Definition of oligopoly e.g. a few firms dominate the market (1) Supermarkets are **interdependent** (1) Other firms will follow if prices are cut (1) Firms will not follow if prices rise or other asymmetric reaction comments (1) Diagram showing a kinked demand curve with annotation or explanation of inelastic section for downward moving prices or elastic section for upward moving prices (1 +1) – Note kinked demand curve is not required Pay off matrix correctly showing that the firm will not change prices (1 + 1) Application – bread is regularly purchased and therefore easy to spot price changes (1) or often a loss leader (1) Example of a knock out: It's not C as if it is tacit collusion it has not been controlled by the regulator/competition authorities It's not D because supermarkets use non price competition such as loyalty cards and customer service schemes	**(4)**

3 In a review in March 2011 Ofgem, the energy regulator, reported that it had concerns over the vertically integrated energy markets. The figure below shows the UK market share of the largest vertically integrated energy firms:

	Percentage of UK market (volume of sales)
EDF Energy	24%
E.ON	12%
RWE npower	10%
SSE	10%
ScottishPower	9%
Centrica	6%

The most likely reason for Ofgem's concerns is:

(1)

A There is a low level of producer surplus

B Vertical integration tends to decrease the concentration ratio

C Centrica is too small to achieve economies of scale

D Vertical integration can create a barrier to entry

E EDF Energy is a legal monopoly

Explanation

(3)

Answer

Question Number	Answer	Mark
3	**D** Vertical integration definition e.g. joining with a firm involved at a different stage of the **same** production process/same industry/same final product (1 mark). Role of Ofgem/regulator e.g. surrogate for competition/to promote competition/act in the consumers' or public interest (1). Explanation: that these firms can control or dominate suppliers or customers/outlets (1 mark) with application or consequence e.g. new firms cannot get onto distribution networks, or other barriers to entry (1 mark). Use of data, e.g. calculation of concentration ratio (1). Example of knockout mark: it is not E because EDF has 24% of the industry, but a legal monopoly is 25% or over (1)	**(4)**

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7 Game theory can be used to illustrate which of the following examples of competitive behaviour?

(1)

A Price leadership in perfect competition

B Revenue maximisation in monopolistic competition

C Limit pricing in monopolistic competition

D Tacit collusion in oligopoly

E Price discrimination by a monopolist.

Answer ☐

Explanation

(3)

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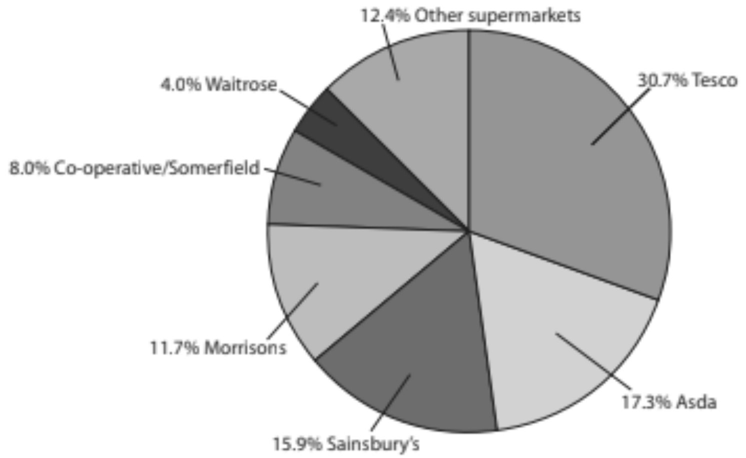
Question Number	Answer	Mark
7	**D** Tacit collusion definition, e.g. that firms co-operate but not formally, or price leadership, or quiet or implied co-operation, secret, unspoken **(1 mark)** Explanation that oligopoly involves interdependence or other characteristics, e.g. a few firms dominate the market. **(1 mark)** Game theory: workable pay-off matrix **(1 mark)** initially with increased prices **(1 mark)** may be used to explain short term gains, e.g. one firm makes profit at the expense of another **(1 mark)** but long term further adjustment, or other use of prisoners' dilemma e.g. both have low prices, collusion breaks down, or Nash equilibrium **(1 mark)** n.b. Nash equilibrium is not required for full marks Alternative approach: Kinked-demand curve analysis or price leadership may be used **(up to 3 marks**, of which, 1 mark for diagram, 1 mark for impact of increased prices described, 1 mark for impact of decreased prices described**)**	**(4)**

3 The following pie chart shows market shares in the UK grocery industry in 2009.



Source: adapted from http://www.tnsglobal.com/news/news-56F59E8A99C8428989E9BE66187D5792.aspx

Which of the following statements is true in the UK grocery market?

(1)

A It is monopolistically competitive

B It has a low level of concentration

C The four firm concentration ratio is 75.6 per cent

D It is perfectly competitive

E The three firm concentration ratio is 60.4 per cent.

Explanation

(3)

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Question Number	Answer	Mark
3	**C** Definition of Concentration Ratio: the n firm CR is the proportion of the market controlled by the largest n firms or theoretical formula e.g. (Σ market share of n largest firms) Method mark 30.7% + 17.3% + 15.9% + 11.7% (1) The market is highly concentrated (1) Characteristics of oligopoly e.g. it means interdependence, a few firms dominate the market, or higher entry and exit barriers (or other definition of sunk costs) (1) with examples from grocery market e.g. advertising (1). Calculation of other concentration ratios: e.g. 3 firm 63.9% is a knock out mark (1) Application e.g. Tesco is a legal monopoly (1)	**(4)**