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**ADVANCED**  
**General Certificate of Education**  
**January 2014**

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## **Economics**

**Assessment Unit A2 1**

**Business Economics**

**[AE211]**

**FRIDAY 17 JANUARY, MORNING**

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### **TIME**

2 hours.

### **INSTRUCTIONS TO CANDIDATES**

Write your Centre Number and Candidate Number on the Answer Booklet provided.  
Answer **Question 1** and **one** question from **Questions 2, 3 or 4**.

### **INFORMATION FOR CANDIDATES**

The total mark for this paper is 80.

Quality of written communication will be assessed in all questions **except 1(a)**.

Figures in brackets printed down the right-hand side of pages indicate the marks awarded to each question or part question.

### **ADVICE TO CANDIDATES**

You are advised to take account of the marks for each part question in allocating the available examination time.

**Question 1**

These articles were compiled from sources published in 2011. Please read them carefully and answer the questions which follow.

**Case study: UK Dairy Farming****Source 1: Changing structure of UK dairy farms**

Year	Number of registered dairy farms	Average size of dairy herd	Average yield (litres per cow per annum)	Total milk production (millions of litres)
2002	24 930	89	6449	14 373
2003	22 992	97	6450	14 343
2004	21 616	101	6631	14 492
2005	20 313	101	6886	14 183
2006	18 626	107	7001	14 020
2007	17 427	114	6963	13 852
2008	16 592	118	6924	13 579
2009	16 008	119	6945	13 209
2010	15 300	122	7075	13 164
2011	14 793	125	7406	13 683

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**Fig. 1: Structure of UK dairy farming industry 2002–2011**

Open any economics textbook at the chapter dealing with the theory of perfect competition and you are likely to see Canadian wheat farming or UK dairy farming used as examples of markets which demonstrate, most closely, the characteristics of perfect competition. With thousands of small producers, millions of consumers and a fairly standardised or homogeneous product, the UK dairy farming industry has long been a useful case study for budding economists trying to get to grips with one of the most fundamental theories of microeconomics.

Herds of grazing cattle have shaped the UK countryside for centuries. Unlike many other developed countries, cows grazing in fields are still a regular sight in the British countryside. There are currently just short of 15 000 dairy farms in the UK, most of which are classified as small or medium sized and the average herd size is 125 animals. These cows are generally free to graze and move around in small regular groups, which suits their sociable nature and therefore helps to reduce animal stress levels and the spread of disease.

However, this model of farming could soon become a thing of the past. Each week nine dairy farmers in the UK go out of business, forced to sell up due to falling returns and increasing costs.

In 2002 there were almost 25 000 dairy farms in the UK; today this number is just less than 15 000. As recently as 2007 the UK was self-sufficient in milk production; today we import 1.5 million litres a day, mostly from Holland and Denmark.

Those farms which survive are getting bigger and bigger with some farmers saying they need at least 500 cows to make a profit. The past few years have also seen a move towards more industrial scale farming, with planning applications submitted last year for two “mega-dairies” each with the capacity to house up to 5000 animals. These animals will be kept indoors all year and fed entirely on silage made from cut grass, thus allowing them to be milked up to four times a day rather than two.

*Source: adapted from various sources August 2011*

## **Source 2: British farmers protest at milk price cuts**

Up to 2000 dairy farmers travelled to London in July 2011 to protest at cuts to the price they are paid for their milk. The National Farmers Union (NFU) organised the gathering to demonstrate their objection to the price cuts which were announced by the three leading milk processors, Wiseman Dairies, Arla Foods UK and Dairy Crest.

Last year dairy farmers received a little under 29p for every litre they sold to the three big processors. However, as a result of the cuts announced recently by the big three, this is set to fall to just under 25p from August 2011.

Since independent estimates suggest that it costs dairy farms on average about 30p to produce a litre of milk, it is not difficult to see how the figures don't add up for Britain's dairy farmers.

A spokesman for the NFU stated, “The latest round of cuts to milk prices by the three major dairy processors will mean dairy farmers are making a significant loss for every litre of milk they produce. This will force ever more farmers out of business and lead to increased prices for consumers in the long run. The economics of milk production in the UK just don't make sense – it is ridiculous that milk is being sold in shops for less than half the price of bottled water.”

*Source: adapted from various sources July 2011*

### Source 3: Factory farming and the rise of the mega dairy

Up until the mid-1980s, most people in the UK got their milk delivered to their doorstep. This milk was processed by a local dairy and was sourced from local cows that spent most of the year grazing fresh green grass. Since then, however, dairy farming has changed beyond recognition.

Today's milk business is dominated by a handful of large supermarkets and processing dairies, all of which have significant monopsony power. These large players have used their market power to demand ever lower prices from dairy farms. These lower margins have in turn forced farmers to squeeze more and more milk from their overworked herd.

Over the last 30 years cows have been selectively bred to produce as much milk as possible. Herds are getting bigger and many farmers, in a bid to keep costs down, now keep their cows inside for most of the year, feeding them on high energy cereals and high protein crops such as soya.

This move towards industrial scale farming follows the trend in the US where mega-dairies have developed which house up to 15 000 cows. These cows are kept indoors for their whole lives and are milked around the clock, therefore producing ever greater yield and improving the efficiency of milk production.

However, not everyone is impressed with the move towards factory farming. Traditional farming representative Tony Scullion stated, "While I have no doubt classical economists will view the move to factory farming as a triumph of efficient food production, consumers and animal welfare groups will see it as a retrograde step". This view is supported by Professor Tony Barson, an expert in the health benefits of dairy produce, who stated "Cramming huge numbers of exhausted animals into mega-dairies creates health problems such as lameness and encourages the spread of infectious disease. As a result factory farmed milk contains lower levels of healthy nutrients, calcium and vitamins. For the sake of the animals themselves and the health of the nation we must resist this move to battery farming with every ounce of energy we have."

*Source: adapted from various sources August 2011*

#### Source 4: Government urged to support UK dairy farming

A new report by the Dairy Farmers Alliance has called on the government to do more to support UK dairy farmers.

The report states that while UK consumption of dairy products has increased in recent years, dairy farmers have not benefited from this increase. “While 99% of UK citizens now eat or drink dairy produce, much of what they eat or drink comes from elsewhere. Almost half of our yoghurt comes from France or Belgium, the cheese we eat is most likely to be made in New Zealand or Latvia and of the most popular national butter brands, only one is made in the UK, with most coming from Denmark or the Republic of Ireland.”

The report highlights a number of specific problems facing UK dairy farming and suggests that only government action can correct the situation.

The issues set out in the report include: rising feed costs, falling farm gate prices, increased bargaining power of the big milk processors, a lack of finance available for investment and the closure of thousands of small dairy farms.

The report’s authors are calling on the government to implement a number of recommendations including: forcing UK supermarkets to source more milk in the UK; imposing a minimum price for milk which takes account of production costs and the need for farmers to make a return; and stricter animal welfare standards that guarantee cows are able to graze freely, at least in summer.

*Source: adapted from various sources August 2011*

- (a) Using the information in **Fig. 1**, describe the changes in UK dairy farming between 2002 and 2011. [5]
- (b) Explain why some dairy farmers are able to remain in business in the short run despite making a loss, while others are forced to shut down. [10]
- (c) Assess the extent to which the UK dairy farming industry could be described as perfectly competitive. [10]
- (d) Critically examine some of the policies the UK government could introduce to improve outcomes for all the stakeholders of UK dairy farming. [15]

**Essays:**

Answer **one** question from **Questions 2, 3 or 4**.

**2 Theory of contestable markets is fundamentally flawed!**

- (a) Explain why, in theory, perfectly contestable markets result in an efficient allocation of resources. [15]
- (b) Critically examine the view that the theory of contestable markets is no better at predicting the conduct of real world firms than the traditional theories of firms' behaviour. [25]

**3 Social costs of economic activity are difficult to measure**

- (a) Explain how an economist measures the social cost of production. [15]
- (b) Evaluate the range of policies the UK government could use to reduce the negative impact of economic activity on society. [25]

**4 Apple accused of colluding with book publishers over price of e-books**

- (a) Explain the difference between competition and collusion. [15]
- (b) Critically examine the view that oligopoly is the least desirable market structure. [25]

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**THIS IS THE END OF THE QUESTION PAPER**

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