



National
Qualifications
2016

X710/76/11

Business Management

FRIDAY, 27 MAY

9:00 AM – 11:15 AM

Total marks — 70

SECTION 1 — 30 marks

Attempt ALL questions.

SECTION 2 — 40 marks

Attempt ALL questions.

It is recommended that you spend 15 minutes reading over the information provided in **SECTION 1** before responding to the questions.

Write your answers clearly in the answer booklet provided. In the answer booklet, you must clearly identify the question number you are attempting.

Use **blue** or **black** ink.

Before leaving the examination room you must give your answer booklet to the Invigilator; if you do not, you may lose all the marks for this paper.



SECTION 1 — 30 marks

Read ALL the following information and attempt ALL the questions that follow.

Mackie's of Scotland: Greener the better

Luxury ice cream producer Mackie's of Scotland is not shy about promoting its green aspirations. The company states that it wants to become a global brand, and in terms of sustainability, the greenest company in Britain.



Ice cream, crisps and chocolate

Mackie's runs its operations from a 1,600 acre dairy farm in Aberdeenshire where raw materials are sourced from neighbouring farms. The company has a 7% share of the total UK ice cream market with sales of over 10 million litres every year.

In 2004 Mackie's launched "Mackice" by selling ice cubes made from locally sourced spring water. In 2009 Mackie's branched out into crisps when it formed a joint venture with Perthshire-based potato processor Taypack. It now exports to markets in over 20 countries and has expanded into the chocolate confectionery market.

Driven by the desire for absolute customer satisfaction, Mackie's has invested in computer controlled mass-production machinery so that 6,000 litres of ice cream per hour can be produced in order to cope with increasing demand. Products go through rigorous quality assurance and control measures before goods are released for distribution to retailers. There is also a highly trained taste panel which benchmarks new products with competitors.

Investment in renewable energy

One of Mackie's most ambitious goals incorporates the entire site: to become 100% self-sufficient in renewable energy. This fits with the Scottish Government's target of generating the equivalent of 100% of Scotland's gross national electricity consumption from renewable sources by 2020.

Mackie's installed its first 50 kW wind turbine in 1983 which produced enough energy to heat a piggery. The technology applied to wind farms has improved drastically in the intervening years and, via the three modern turbines currently on site, Mackie's has an installed renewable energy capacity of 2.5 MW.

Mackie's estimates that since the installation of the turbines, it has saved approximately 3,480 tonnes of carbon emissions that would otherwise have been produced by the company's day-to-day operations.

Mackie's Marketing Director, Karin Hayhow, said: "The wind turbines are incredibly efficient and have performed much better than expected, largely due to the good location we occupy and the fact that Scotland is the windiest country in Europe".

“However we also have a lot of other exciting projects, such as having on-site injection moulders to make our own tubs.” This required an investment of over £1 million and reduced emissions from not having to import packaging from Sweden.



As well as utilising wind to produce energy, Mackie's is also harnessing solar power. In February 2012 150kW of solar panels were installed on the site. “Through this, we are saving almost £500,000 per year on our electricity bills, and with electricity prices increasing, our savings are only set to rise. This enables us to invest in more efficient machinery and processes that, in turn, help to keep the cost of production down.”

Looking to the future

Mackie's is in no way finished with its energy efficiency campaign and has a series of projects that it is looking to implement in the near future:

- Construct a fourth wind turbine.
- Build a 1.5 MW solar farm to increase renewable capacity.
- Invest in electric vehicles on the farm for the use of staff.

Mackie's Finance Director, Gerry Stephens, said: “For any business, managing the bottom line is essential, and cutting energy costs as well as reducing carbon emissions should always be included in any robust business plan.”

[Turn over

Further Information

Exhibit 1

Overview of Mackie's renewable and sustainability

<i>Solar Energy</i>	<p>The company has over 700 solar panels which generate electricity to power various parts of the farm and the milking robots.</p> 
<i>Zero Waste Water</i>	<p>Waste water is pumped back over the land. The cows also drink the clean waste water.</p>
<i>Natural Fertiliser</i>	<p>The slurry from the cows is used as natural fertiliser, reducing the amount of commercial fertiliser which is bought.</p>
<i>Harnessing Wind</i>	<p>Mackie's commercial turbine was installed in 2005 with a further investment of £1.7 million to add two more in 2007. These two new turbines have more than trebled the electricity generated, saving the company £280,000 a year in electricity bills.</p> <p>Mackie's makes a surplus of energy which is sold to the company Good Energy.</p>
<i>Recycling Packaging</i>	<p>Mackie's recycles cardboard, plastic, wood, batteries and metal.</p>

Exhibit 2

Additional information on marketing activities

2002	2004	2010	2012	2013
Official ice cream sponsor of the World Cup in South Korea.	Launched low fat chocolate iced dessert suitable for diabetics.	Sponsor of the Macrobert JustGiving appeal to support deprived families.	New website to promote news, competitions and get valuable customer feedback.	Launched a television advert to further promote its ice cream.

Adapted from: mackies.co.uk

Exhibit 3

Extract from Mackie’s social media site informing customers of special offers

**Mackie's Ice Cream**
12 September

Great offer at Tesco Scottish stores only . . . 1 litre Traditional, Honeycomb, Strawberry, Chocolate, Chocolate Mint and Raspberry Ripple — SAVE £1. Offer ends 15th September. Happy shopping!



Like · Comment · Share

200 Shares

118 people like this

Adapted from: facebook.com/mackiesicecream

[Turn over

Exhibit 4

Summary of financial performance

	<i>2011</i> <i>£</i>	<i>2012</i> <i>£</i>	<i>2013</i> <i>£</i>
<i>Revenue (Sales)</i>	11,629,244	11,509,252	10,284,432
<i>Gross Profit</i>	5,079,814	4,913,867	4,322,633
<i>Profit for year</i> <i>(Net Profit)</i>	255,682	197,079	546,801

Adapted from: companieshouse.gov.uk

The following questions are based on ALL the information provided and on knowledge and understanding you have gained whilst studying the course.

- | | | | |
|----|-----|--|---|
| 1. | (a) | (i) Describe 2 suitable pricing strategies for Mackie's luxury ice cream produce. | 4 |
| | | (ii) Discuss the "out of the pipeline" methods of promotion identified in the case study. | 4 |
| | (b) | Explain, using examples from the case study, the benefits to Mackie's of having a diverse product portfolio. | 4 |
| | (c) | Describe the reasons why Mackie's heavily invested in renewable energy methods. | 3 |
| | (d) | Compare the method of production used by Mackie's with job production. | 4 |
| | (e) | Discuss the methods of ensuring quality identified in the case study. | 5 |
| | (f) | (i) Describe the ratios which could be calculated from the financial information in Exhibit 4 . | 3 |
| | | (ii) Using Exhibit 4 , explain the trends in Mackie's profits. | 3 |

[Turn over for next question]

SECTION 2 — 40 marks**Attempt ALL questions**

- | | | |
|--------|--|---|
| 2. (a) | Describe the methods which may be used to motivate employees. | 4 |
| (b) | Explain the benefits of an appraisal system. | 4 |
| (c) | Describe the benefits of workforce planning. | 2 |
| 3. (a) | Explain the advantages of internal (organic) growth. | 4 |
| (b) | Discuss the use of geographical grouping. | 3 |
| (c) | Describe the advantages of being a social enterprise. | 3 |
| 4. (a) | (i) Describe the impact of competition policy on an organisation. | 2 |
| | (ii) Other than competition, explain the impact of external factors on an organisation. | 5 |
| (b) | Distinguish between a tactical decision and an operational decision. | 3 |
| 5. (a) | Justify the use of spreadsheets within the finance department. | 4 |
| (b) | Other than spreadsheets, describe how modern technology can be used by the finance department. | 6 |

[END OF QUESTION PAPER]**ACKNOWLEDGEMENTS**

Section 1 - Case Study - Image and information are taken from www.mackies.co.uk. Reproduced by kind permission of Mackie's of Scotland.

Section 1 Exhibit 3 - Image of Mackie's solar panels are taken from <http://www.thescottishfarmer.co.uk/renewables/solar-power/sunshine-and-ice-cream.17908202>. Reproduced by kind permission The Scottish Farmer, The Herald and Times Group.

Section 1 Exhibit 4 - Data is adapted from www.companieshouse.gov.uk. © Crown Copyright. Reproduced under Open Government Licence.