GCE A level

wjec cbac

1605/01

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S16-1605-01

APPLIED BUSINESS – ABUS5
Paper version of on-screen assessment

P.M. TUESDAY, 14 June 2016

2 hours

INSTRUCTIONS TO CANDIDATES

Use black ink or black ball-point pen.

Write your name, centre number and candidate number in the spaces at the top of this page.

Candidates are required to answer **any two** of the following sections:

Section A	Decision-making and the Marketing function. Pages 4 - 9.
Section B	Decision-making and the Production function. Pages 10 - 14.
Section C	Decision-making and the Finance function. Pages 16 - 21.
Section D	Other decision-making tools. Pages 22 - 28.

All questions in **both** your chosen sections are compulsory.

The context for all sections is set in the Introduction.

INFORMATION FOR CANDIDATES

Quality of Written Communication

This will be assessed in questions:

Section A	Question 6
Section B	Question 6
Section C	Question 6
Section D	Question 6 ((a) & (b)).

Calculators may be used.

SECTION	For Examiner's use only	
	Question	Mark Awarded
	1.	
	2.	
	3.	
	4.	
	5.	
	6.	
	7.	
	1.	
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	Total	

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INTRODUCTION

DonkeyHelp

The following information applies to **all** sections.

DonkeyHelp (DH) is a UK-based international charity dedicated to improving the quality of life for as many as possible of the 50 million donkeys and mules (a donkey-horse hybrid) that live worldwide. As a charity, it relies on legacies (money donated by people in their wills), donations, sponsorship and the sale of goods online and in its UK centres, called 'Sanctuaries'. The work of *DH* includes: re-homing donkeys and mules at these Sanctuaries; supporting international projects to educate about, and to protect, donkeys and mules; and offering 'animal-assisted therapy' for adults and children who have a range of additional needs.

The original *DH* Sanctuary is near where you live. You have been placed here for a period of work experience.

Hello. I'm Liz George, the Manager. We're DH's main Sanctuary, and we welcome visitors who come to see our donkeys and mules – 'the residents', as we call them. We don't charge for parking or admission and so our income here comes from our shop and restaurant sales, and by encouraging people to 'adopt a resident' for a small annual fee. We've just started to build more donkey shelters and to expand the size of the restaurant. I hope you'll enjoy your time here.

(1605-01)   **Turn over.**

SECTION A

Decision-making and the Marketing function

Our Marketing Department is based here, at our main Sanctuary. It's here that we make most of our key decisions, such as whether or not we can afford to open a new Sanctuary and, if so, where to locate it. We're in the process of making such a decision now. Our Marketing staff use sales forecasting techniques to help us make decisions when we come to plan and review the 'four Ps' of marketing – I'm sure you know what these four Ps are!

1. Liz has told you that the management team plans to open another Sanctuary. One possible location is in the county of Norfolk. Every *DH* Sanctuary regards the local area as its market, and seeks to generate as much income as possible from this market.

Explain why *DH* needs to segment its market appropriately. [4]

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2. The managers at *DH* regard Norfolk as a possible location, and therefore a market, for the new Sanctuary. They are reviewing this market, and have just been given the information below.

Norfolk's population is estimated at 870,100 in mid-2013 – an increase of around 4,800 on the previous year. Over the last decade, Norfolk's population has increased by 6.7%. Numbers of children and young people (aged 0-17) rose marginally, numbers of working age adults (aged 18-64) increased by around 17,000, and numbers of older people (aged 65 and over) increased by around 34,200 (20.6%).

Over the next decade there is projected growth of 60,600 people in Norfolk – an increase of 7%. The largest increase in numbers is projected to be in South Norfolk, and the smallest increase in numbers is projected to be in Great Yarmouth. The oldest age groups are projected to grow the quickest. Although numbers of children aged under 15 are also projected to increase, overall there is little change projected over the decade for younger adults and the middle-aged.

Source: Norfolk Insight 2014 (adapted)

(a) Identify **two** types of market segmentation contained in the information provided. [2]

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(b) Suggest, justifying your suggestions, **two other** suitable ways for the managers to segment **this** market in order to help them decide whether or not to locate the new Sanctuary in Norfolk. [6]

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3. Outline **two** limitations of market research that the managers of *DH* will need to consider when reviewing the results of their market research. [4]

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4. Traditionally, *DH* has targeted its promotion at children, teenagers and the elderly. Quota sampling is used to obtain people's views and opinions about its Sanctuaries.

(a) Outline briefly how *DH* is likely to carry out its quota sampling. [2]

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(b) Suggest **one** weakness associated with the results of quota sampling. [2]

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5. Liz has mentioned to you that *DH* staff carry out sales forecasting.

Explain how staff in *DH's* Marketing Department could use sales forecasting to support marketing decisions relating to how the items it sells are **priced**, and how its various activities are **promoted**. [4]

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6. As part of your induction, Liz has sent you the information taken from a recent *DH* Annual Review document, shown below.

DonkeyHelp: *the Donkey Sanctuary*

Here's the extract from our Annual Review and Accounts.

Source of income (UK nationwide)	2013 £000	2014 £000	2015 £000
Legacies from people's wills	8 000	8 800	9 680
'One-off' donations	3 200	3 360	3 444
Sales made by our trading company	550	550	550
Investment income	400	380	361
Other income (including animal sponsorship)	200	400	800
Total income	12 350	13 490	14 835

Analyse the sales trends shown by this extract, using calculations to support your analysis. [8]

7. Using information in the extract from the Annual Review and Accounts, assess the limitations to *DH* of using **this information only** to plan its future marketing strategy. [8]

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END OF SECTION A

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SECTION B

Decision-making and the Production function

We're one of many international charities. Operating on an international basis is quite common in this age of increasing globalisation. Here in the UK we plan to build more shelters for our donkeys, and extend the restaurant to generate more revenue. I'm told that value analysis could help with these tasks. When the restaurant extension is completed we plan to use a new system of stock ordering and control in an attempt to cut costs.

1. *(a)* What is meant by 'globalisation'? [2]

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(b) Outline **two** likely influences of increasing globalisation on the work of an international organisation such as *DH*. [4]

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2. Liz is not familiar with value analysis. Using the email below:

(a) describe the purpose of value analysis; [2]

(b) analyse **two** benefits to *DH* from using value analysis when **designing the new shelters.** [6]

From:	Candidate
To:	Liz George
Subject:	Value Analysis
Date:	Today

3. Food sold in the existing restaurant is prepared by restaurant staff using batch production methods. *DH* will use job production methods when building the new restaurant extension.

Explain why:

(a) batch production is an appropriate method for preparing the restaurant food; [3]

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(b) job production is an appropriate method for constructing the restaurant extension. [3]

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4. Once the extension is completed the restaurant will be double in size, with twice as many visitors being able to eat there at the same time.

Explain how *DH* might gain from the economy of increased dimensions once the restaurant extension has been completed. [6]

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5. When the restaurant extension is completed, Liz plans to set up a Just-in-Time (JIT) system for the stocks of food and drinks.

(a) Describe how the proposed JIT system is likely to operate in the restaurant. [2]

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(b) Explain **one** effect of setting up a JIT system on the work of *DH's* **purchasing** function. [2]

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6. Liz hopes that the proposed JIT system will lower costs.

Assess whether or not a JIT stock system in **this** situation is likely to **lower costs** for *DH*. [10]

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END OF SECTION B

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SECTION C

Decision-making and the Finance function

We're hoping that once the restaurant has been extended it will increase our income, and we're budgeting carefully to ensure we make a profit. As we'll shortly need to check the delivery and control of our food and drink stocks for the restaurant, I want to start reviewing our suppliers. I've some financial information about two of them, and I'd appreciate your help.

1. *DH* sets fixed budgets rather than flexible budgets.

   (a) Explain the difference between a fixed budget and a flexible budget. [4]

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(b)   Analyse the benefits to *DH* if fixed budgeting is replaced by flexible budgeting.   [6]

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2. Finance staff at *DH* have prepared a fixed budget for restaurant sales, for the first four weeks following the opening of the extended restaurant. The budget has been prepared on the assumption that **all** restaurant food and drink available for sale will in fact be sold.

Using the table below:

(a) create a flexed restaurant sales budget for the given levels of activity; [6]

(b) calculate the expected profit or loss at **both** activity levels, stating clearly whether it is a profit or a loss. [2]

	Levels of activity (%)		
	80	**90**	**100**
	£	**£**	**£**
Restaurant sales:			18 500
Restaurant costs:			
Kitchen staff wages*			6 400
Restaurant staff wages*			4 250
Cost of food and drinks consumed			3 750
Fixed overheads			1 100
Variable overheads			500
Profit/(loss)			2 500

*Budget preparation staff regard kitchen staff wages as being fixed, and restaurant staff wages as variable.

3. According to Liz's calculations, the present activity level for the restaurant is 75%. What will happen financially if this 75% activity level continues once the extended restaurant is open? [2]

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4. Liz has sent you the information below about two of *DH's* food suppliers.

DonkeyHelp: *the Donkey Sanctuary*

Here is the information I'd like some help with.

Ratio	*HiQual Foods plc*	*Microfood plc*
Acid Test Ratio	0.4 : 1	0.2 : 1
Current Ratio	1.2 : 1	0.4 : 1
Gearing*	0.4 : 1	1.2 : 1
Payables Collection Period ('Creditor days')	42 days	70 days
Profit in relation to Revenue (Net Profit Margin)	3.5%	4.5%
Receivables Collection Period ('Debtor days')	28 days	21 days
Return on Capital Employed	7.0%	6.5%

* We calculate Gearing as Long-term Liabilities divided by Equity (Share Capital)

Using the information above, analyse the results of:

(a) **two** appropriate ratios that give information about the efficiency of **each** company when it is **trading on credit**; [6]

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(b) **one** appropriate ratio that gives information about **each** company's **capital structure**.

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5. Liz also has the following information on the Asset Turnover ratios of these companies:

- *HiQual Foods plc*   6 times a year
- *Microfood plc*   4 times a year

Liz has asked for your help. Using the email below, explain to Liz the purpose of this ratio, and what the ratio calculation indicates for **each** company.   [4]

From:	Candidate
To:	Liz George
Subject:	Asset Turnover
Date:	Today
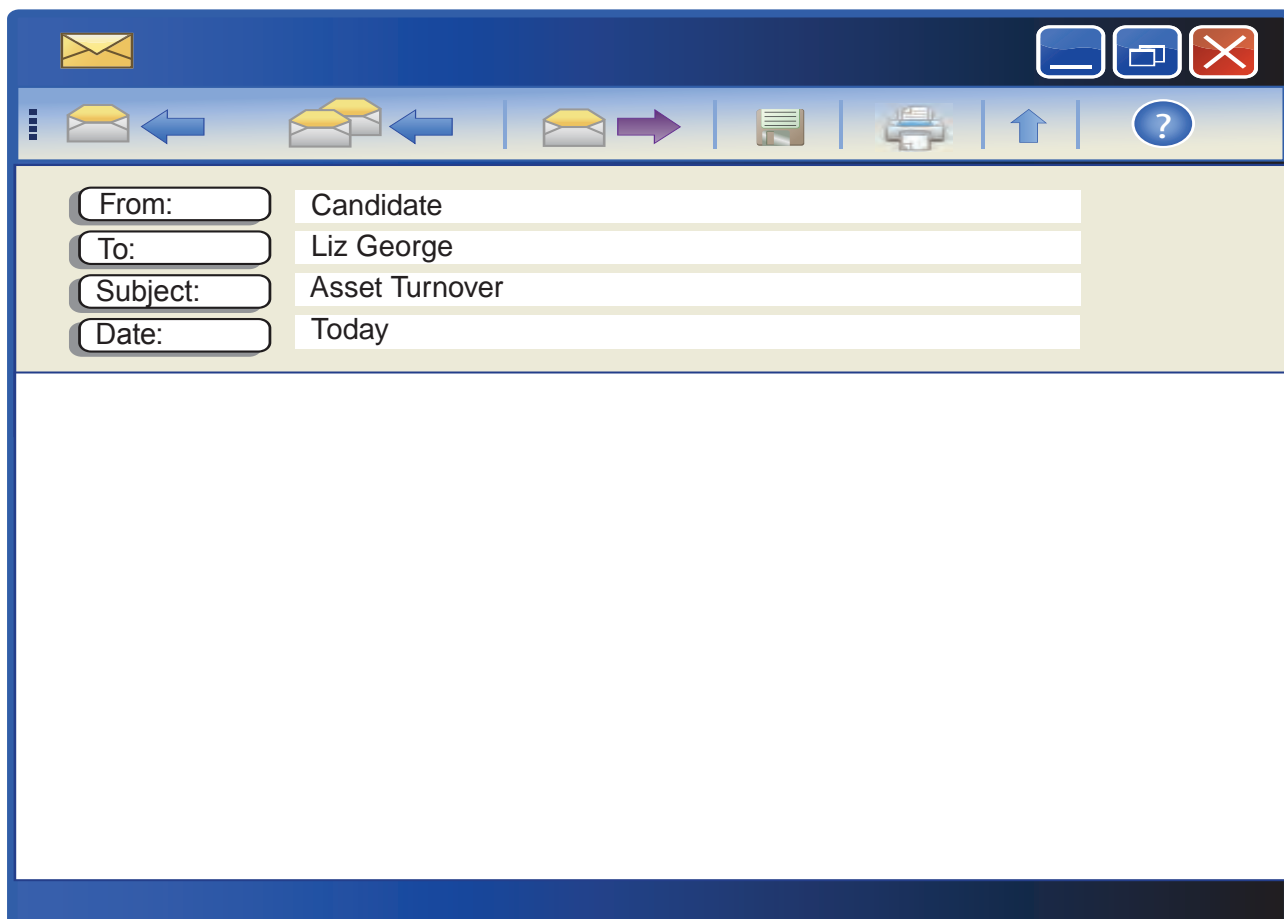
6. At some stage, Liz wants to carry out a more detailed review of *HiQual Foods plc* and *Microfood plc*.

To what extent can **these suppliers** be judged using **only** ratio analysis? [6]

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END OF SECTION C

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SECTION D

Other Decision-making tools

We're aware that we can improve communication with visitors and the general public. I'm researching whether or not we should sell a monthly newsletter here that would feature the Sanctuary and our work elsewhere in the UK and overseas. It will need to be profitable, and more professionally produced than our present free one, so we'll look into investing in some new printing equipment.

1. The information below contains some figures from Liz about the proposed monthly newsletter.

DonkeyHelp: *the Donkey Sanctuary*

Sales and cost information on the proposed newsletter is shown below. I've worked out probabilities but I'm not sure how reliable these calculations will prove to be. At the moment, I don't know which printing machine to buy and how much of the newsletter will be in colour.

Expected monthly newsletter sales (units)

Number sold	Probability of this occurring
520	0.10
560	0.15
600	0.25
640	0.35
680	0.15

Note: we plan to set a £1.50 selling price.

Cost of each newsletter

£	Probability of this occurring
0.75	0.4
1.00	0.4
1.25	0.2

Liz has asked you for some help. Using the information provided, calculate the following:

(a) expected monthly sales (units); [3]

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(b) expected cost of **one** newsletter; [3]

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(c) expected monthly profit or loss (state clearly whether it is a profit or a loss). [4]

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2. Liz has provided information on the probability of sales and costs but she is "... not sure how reliable these calculations will prove to be".

(a) What is meant by probability? [2]

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(b) Explain why Liz is correct **not** to regard probability calculations as being completely reliable. [4]

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3. Instead of setting up a monthly newsletter, Liz could consider alternative ways of investing *DH's* finances to increase profits.

Explain how using decision tree analysis would help Liz make appropriate investment decisions.
[4]

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Turn over.

4. To save costs, Liz plans to buy 'in-house' printing equipment rather than outsource the printing work, and she is reviewing two machines. The table below contains information about these machines.

	Roland Soljet Pro	*Heidelberg GTO*
Cost (£)	12 600	16 750
Estimated life	5 years	5 years
Estimated resale value (£)	3 000	4 250
Estimated future cash flows:	£	£
Year 1	9 500	10 250
Year 2	12 400	13 000
Year 3	20 250	24 000
Year 4	22 500	25 000
Year 5	24 000	26 500

Using the Payback method, calculate the payback time for both machines and state, with a reason, which machine should be purchased according to this method. [6]

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5. Analyse the advantages of using the Payback investment appraisal method to make **this** decision. [4]

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6. Liz is thinking of using just the Payback method to select a printing machine.

(a) Assess the limitations of using **only** the Payback method to make **this** decision. [6]

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(b) Examine how alternative investment appraisal methods would provide additional information for Liz. [4]

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END OF SECTION D

END OF PAPER