

Surname	Centre Number	Candidate Number
Other Names		2



GCE A level

1605/01

APPLIED BUSINESS – ABUS5
Paper version of on-screen assessment

P.M. WEDNESDAY, 12 June 2013

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 - 10.**
- Section B** **Decision-making and the Production function. Pages 12 - 17.**
- Section C** **Decision-making and the Finance function. Pages 18 - 23.**
- Section D** **Other decision-making tools. Pages 24 - 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 7
- Section B Question 6
- Section C Question 7
- Section D Question 7

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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	3	
	4	
	5	
	6	
	7	
	Total	

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INTRODUCTION



Freezefree Ltd

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

Freezefree Ltd (FF Ltd) is a supplier of double-glazed windows, doors and conservatories. Products sold by *FF Ltd* are made from glass and from uPVC, a rigid plastic-type material widely used in the building industry. uPVC is low maintenance, long-lasting, and can be manufactured in a range of colours and finishes.



In your local area *FF Ltd* has a site containing its Head Office and one of its factories. On this site, in addition to the factory and Head Office premises, there is a showroom where *FF Ltd*'s products are displayed.

You have been placed in *FF Ltd*'s Head Office for a period of work experience.



Hello, it's nice to meet you. Let me introduce myself. My name is Kevin Brown and I work in Freezefree Ltd's Human Resources department. I've located a desk for you, and we'll soon have you working on a few tasks to help us. Before we do that, I'm in the process of arranging a short induction programme for you, so you'll soon know a lot more about our company and what we do here.

SECTION A

Decision-making and the Marketing function



As part of your induction, I'll give you some information on our four main product groups. We analyse these product groups using the 'Boston Box' matrix, which you might know. We keep a close eye on the markets for these product groups by monitoring our sales trends and our approaches to marketing.

1. Kevin has sent you the following email as part of your induction.

The screenshot shows an email client window with a blue title bar and a toolbar. The email header is as follows:

From	Kevin Brown
To	Work Experience Student
Date	Today
Subject	Products and markets

The main body of the email contains the following text:

Our four product groups are: (a) windows and doors, (b) conservatories, (c) solar panels and (d) driveways.

Double-glazed windows and external doors are our staple products and we are one of the largest manufacturers in this long-established, mature market that is still growing, but slowly.

The market for conservatories is more recent and a faster-growing one. It took us some time to become involved in this market so we have only a small share of it, even though our products are popular with homeowners.

The solar panel market is the newest one and is growing very quickly. We learned our lessons from the slow entry into the conservatory market, so we moved quickly and have a large slice of this market.

It's a good idea in principle to diversify, but you need the right products. We've found the driveway market to be competitive and with slow growth. We sell few driveways, partly because people don't see us as specialists in this market.



Decide how **each** of *FF Ltd's* four product groups would be classified using the BCG Matrix ('Boston Box') analysis. Support your decisions by quoting relevant evidence from the email.

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2. Using the information in the email given in question 1, explain appropriate **pricing** and **promotional** strategies for any **one** of *FF Ltd's* product groups. [6]

3. Explain **two limitations** of the BCG Matrix as a marketing tool for *FF Ltd* to use. [6]

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4. Kevin Brown has asked you to identify any trends contained in the table below, which shows sales figures for external doors made and sold by *FF Ltd*.

Calculate the moving total and moving average of **four quarters'** sales. Enter the results of your calculations in the **unshaded** cells in the Moving Total and Moving Average columns. [8]

Year/ Quarter	External doors sold	Moving Total	Moving Average
2010 Q2	1 257		
Q3	842		
Q4	2 286		
2011 Q1	1 951		
Q2	1 229		
Q3	818		
Q4	2 266		
2012 Q1	1 935		
Q2	1 217		
Q3	810		
Q4	2 262		
2013 Q1	1 935		

5. Using the information given in question 4 and your calculations, comment on any trend(s) shown. [2]

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6. The table in question 4 contains evidence of seasonal variations but no evidence of random variations.

(a) Outline what is meant by ‘seasonal variations’, using information from the table to support your answer. [2]

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(b) Give **two** likely examples of the causes of random variations for *FF Ltd*. [2]

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7. The table in question 4 shows the combined sales figures for the different types of external doors made and sold by *FF Ltd*.

Assess how helpful **this** time series analysis is to *FF Ltd*. [6]

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END OF SECTION A

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SECTION B

Decision-making and the Production function



When you visit our factory, you'll meet Harry Langton, our Production Director. Harry will no doubt explain that we are in the process of changing some of our production methods. I know Harry is planning to introduce some new approaches to production work that he thinks will benefit both the company and the Production staff. We've already reviewed and changed how we deal with our stocks – something about FIFO and AVCO. It's not my area of expertise so I'm sure Harry will explain further.

1. *FF Ltd's* factory uses job, batch and flow production methods. At present, door panels and fittings are made in batches. Harry Langton, the Production Director, hopes to start making these door panels and fittings using flow production methods.
- (a) Outline **two** factors that the Production Director needs to consider before changing the production method from batch production to flow production. [4]

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(b) Describe **one** advantage and **one** disadvantage to the **employees** if *FF Ltd* switches to building door panels and fittings using flow production methods. [4]

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2. Other products made by *FF Ltd* include the following:

- **Windows.** Each window is manufactured using measurements taken by *FF Ltd's* sales employees who have visited customers' houses.
- **Solar panels.** *FF Ltd* makes solar panels in three different sizes.

Choose the **most appropriate** production method for **each** of these products, giving a reason in each case why this production method is being used. [4]

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3. Harry Langton wants to introduce cell production methods into *FF Ltd's* factory.

(a) What is 'cell production'? [2]

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(b) Outline **one** advantage to *FF Ltd* if cell production is introduced into the factory. [2]

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(c) Analyse how *FF Ltd* will need to adapt or change in order to implement cell production successfully into the factory. [4]

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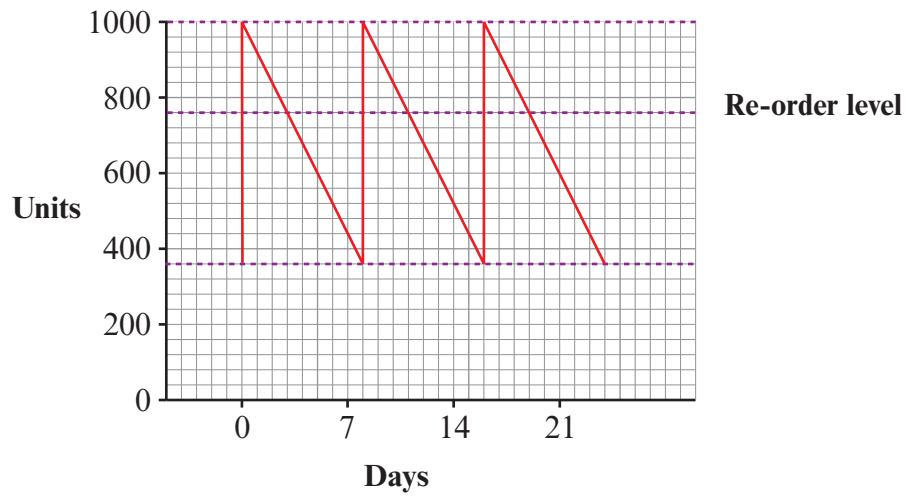
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4. The stock control diagram for door locks is shown below.



Using the diagram, state for this stock item the following:

- re-order quantity
- frequency of orders
- buffer stock
- lead time

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5. The Production Department has recently changed the First In First Out (FIFO) method to the Average Cost (AVCO) method for its closing stock. The calculation used by *FF Ltd* for both methods is:

$$\text{number of items in stock} \times \text{cost per item} = \text{closing stock held}$$

- (a) Name **one other** business function that would be involved in agreeing to this change. Give a reason for your choice of business function. [2]

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- (b) Explain why, when *FF Ltd* uses the same calculation for both methods, the closing stock held will be a different figure if AVCO rather than FIFO is used. [3]

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- (c) Explain whether the change from FIFO to AVCO is likely to affect *FF Ltd's* policy of issuing stock to production. [3]

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6. Assess the benefits gained by *FF Ltd* as a result of changing from FIFO to AVCO.

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SECTION C

Decision-making and the Finance function



We need to keep careful control of our finances because there are so many competitors in the double-glazing industry. We ensure that our cash and other budgets are fully reviewed and we regularly check our costs against the benefits they bring. Although we have good links with a number of retailers, we have to balance the benefits we gain from these links against the costs associated with them.

1. *FF Ltd* has close links with two large retailers. The company has showrooms in most of the stores of both retailers. A sales employee of *FF Ltd* works in every showroom and *FF Ltd* has to pay substantial floor rental costs.

In an attempt to control costs, Georgia Hale, the Finance Director, is proposing that *FF Ltd* should only continue having a showroom at one of these retailers. She has the following information from the most recently published financial statements of each retailer.

Ratio	Retailer	
	<i>Purviance plc</i>	<i>Cherrill Ltd</i>
Return on capital employed	9.8%	12.3%
Payables collection period ('creditor days')	35 days	42 days
Annual inventory (stock) turnover	28.3 times	40.3 times

For each ratio

- compare the performance of the two retailers

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- analyse whether this ratio calculation is relevant to *FF Ltd* when deciding with which retailer it will continue working [6]

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2. The two retailers have different financial year-ends. *Purviance plc's* financial year runs from April to March, and *Cherrill Ltd's* runs from July to June.

Explain whether this difference in financial year-ends will influence Georgia's assessment of the financial performance of the two retailers. [3]

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3. Identify **four** items of information, **other than ratios**, which are needed to give a fuller picture of the financial performance of the two retailers. [4]

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4. Explain why ratio analysis is of only limited value to a business such as *FF Ltd* when making financial judgements. [4]

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5. Georgia Hale, the Finance Director, has recently set a new cash budget for *FF Ltd*.

(a) State the relationship between a cash budget and a cash flow forecast. [2]

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(b) Analyse the benefits to *FF Ltd* arising from the use of **cash** budgets. [6]

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6. Georgia Hale prepares a monthly Cash Budget Report for *FF Ltd.* For each inflow and outflow, Georgia calculates variances by expressing the actual cash as a percentage of the budgeted cash. She has to complete these calculations for the most recent report, which is shown below.

Complete the report by calculating:

- the total actual cash receipts and payments
- individual actual receipts and payments as a percentage of budget (some calculations have been entered for you)

[6]

Budget versus Actual Report			
Item	Budget (£)	Actual (£)	% Variance
Opening cash balance	50 000	50 000	100.0
Receipts: Cash sales	120 000	117 600	98.0
Receipts from debtors	280 000	268 800	96.0
Total receipts	400 000		
Payments: Stock purchases	88 000	89 760	
Payroll	192 000	201 600	
Selling and distribution	22 500	45 000	
Administration	62 500	63 125	
Plant and equipment	30 000	30 000	
Total payments	395 000		
Closing cash balance	55 000		

7. Using information in the report provided in question 6 and your calculations, assess the performance of *FF Ltd* in terms of meeting its budgeted cash figures. As part of your assessment, state the **largest** variance and suggest likely reasons for this. [6]

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SECTION D

Other decision-making tools



We make and sell a variety of products. Although double-glazed windows and external doors are our staple products, we're keen to develop our market share of solar panels, which are becoming more popular in the UK and are profitable for us. We're examining a couple of options we have in terms of trying to increase our share of this fast-growing market in the UK and the rest of Europe.

1. The table below shows recent sales figures for two of *FF Ltd's* door styles. Using this table, convert these sales into index numbers. *FF Ltd* uses 2005 as the base year for all index number calculations.

Your index numbers should be calculated and rounded to **one** place of decimals.

[4]

Year	'Rose' Model (£)	'Rose' Index	'Tulip' Model (£)	'Tulip' Index
2012	43 350		40 528	
2011	43 265		40 230	
2010	43 180		39 932	
2009	43 095		39 634	
2005	42 500	100.0	37 250	100.0

2. Using the table from question 1 and your calculations, analyse the sales performance of these two models. [4]

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3. The market for solar panels is a fast-growing one, and *FF Ltd* has a large share of this market. *FF Ltd* has obtained the following index numbers on renewable energy.

**Solar panels, wind and wave energy production:
2010 Q1 = 100**

Period	Index
2010 Q1	100.0
2010 Q2	105.2
2010 Q3	139.7
2010 Q4	125.9
2011 Q1	132.8
2011 Q2	158.6
2011 Q3	155.1

- Identify **two** weaknesses if *FF Ltd* uses **this** index for forecasting purposes. [4]

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4. At present *FF Ltd* makes and sells three sizes of solar panels. The directors of *FF Ltd* are considering two alternative courses of action.

Option A to start making and selling a new size panel

Option B to make and sell ‘standard’ and ‘superior’ versions of the three panels

The directors have constructed a decision tree to help in their decision. The decision tree shows Option A is expected to generate an extra £276 000 sales a year and Option B is expected to generate an extra £278 000 sales a year.

Explain the **limitations** of decision trees in **this** situation.

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5. The directors have decided to use the Average Rate of Return (Accounting Rate of Return) (ARR) to review Options A and B mentioned in question 4.

Describe the purpose of the ARR and state how it can be calculated. [4]

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6. Options A and B mentioned in questions 4 and 5 will have the same initial capital investment of £380 000. The profits for both options are as follows:

	Option A (£)	Option B (£)
Year 1	30 000	16 000
Year 2	45 000	37 000
Year 3	45 000	50 000
Year 4	50 000	65 000

- (a) Calculate the ARR for each option. [4]

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(b) Assess the information provided on the options and the results of your calculations and advise *FF Ltd* on which, if any, option it should select. [4]

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7. Assess the value to the directors of *FF Ltd* of using the ARR method to make **this** decision. [8]

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