Surname

Centre Number

2

Candidate Number

Other Names



GCE A level

1605/01

APPLIED BUSINESS UNIT ABUS 5 Paper version of on-screen assessment

P.M. MONDAY, 14 January 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 - 11.
- Section B Decision-making and the Production function. Pages 12 - 16.
- Section C Decision-making and the Finance function. Pages 18 - 25.
- Section D Other decision-making tools. Pages 26 - 31.

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 3

- Section B question 5
- Section C question 6
- Section D question 5

Calculators may be used

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

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INTRODUCTION



J BARKER plc

The following information applies to all Sections.

J Barker plc (JB plc) is a UK 'high street' company that sells in its stores a range of products and services. These include men's and women's clothing and footwear, household goods, furniture, food and wine. There is some 'in-house' production of food and drinks sold in store restaurants.

		-
-	2	-
	2	
	1	

JB plc's Head Office is in your local area, and it has a number of stores in cities and large towns throughout England and Wales. JB plc has close links with a number of companies, including PlayTek Ltd, a supplier of electrical items.

You are to undertake work experience at the company's Head Office.



Hello. Thanks for joining us on work experience, and I hope you enjoy your time with us. I'm Jo Jenkins and I'm employed as the company's Liaison Officer. This means that I'm the first point of contact here at Head Office for our store employees.

We'll shortly arrange a full induction for you, though I expect you already know a little about our company. Because our stores are located in out-of-town shopping centres or on the high street, in some ways we're similar to businesses such as Marks & Spencers, Tesco and House of Fraser, though as yet we're nowhere near as large as those companies.

One of my jobs at JB plc Head Office is to look after our work experience people. If you've any questions or concerns about your work with us, please let me know and I'll see how I can help.

Section A

Decision-making and the Marketing function



We plan to open a number of new "Games & Gadgets" electronics stores. We're targeting children and teenagers and we'll open one store first, in Wolverhampton, to see how things go. Here at Head Office, I've collected some statistics about the population in Wolverhampton, and I'd like you to help me analyse this information.

1. The products in the Games & Gadgets store will be targeted at children and teenagers.

Explain whether or not random sampling will be a suitable method for collecting relevant information to judge the likely success of this new store. [4]

Examiner only

- Examiner only
- 2. Because the Games & Gadgets store will target children and teenagers, Jo has decided to sample Wolverhampton's relevant age groups.

Jo has collected the following information about Wolverhampton from the 2001 Census. To help you, she has rounded some of the figures.

A. Resident population of Wolverhampton: 236 582. Of this total, **49 per cent** were male and **51 per cent** were female.

B. Age groups (%)

Age group	Wolverhampton	England & Wales
Under 16	20.9	20.2
16 to 19	5.1	4.9
20 to 29	13.1	12.6
30 to 59	39.0	41.5
60 and over	21.8	20.9

Using the above information, calculate a **2.5% sample** of the target market of children and teenagers, stating the number of:

males in the sample
females in the sample
the total sample. [6]

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the Gam	nes & Gadget	ts stores.			 Ĩ	[10]
		•••••	 •••••	 •••••	 	••••••

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4. Jo has received the following email from the Manager of the current Wolverhampton *JB plc* store, concerning the setting up of the new Games & Gadgets store.

🗠 🖛		?
From: To:	Wolverhampton Manager Jo Jenkins	
Date: Subject:	Today "Games & Gadgets"	

Hi Jo

Yes, we'll be happy to work with our "Games & Gadgets" colleagues. If it will help, we can provide you with some recent and relevant sales trends, and I can come up with a sales forecast for the new items if you like. Though I have been given the information below, I'd prefer to use a qualitative method for any forecast. What marketing strategies do you have in mind?

Here are those statistics about Wolverhampton's labour force that I've been given. Maybe someone at Head Office can use this?

Labour category	Wolverhampton population %
In employment	70.6
Unemployed	12.7
Students	6.6
Retired, sick or other	10.1

9	
 Describe what the following terms mean in the email. "relevant sales trends" 	Examiner only
• "sales forecast for the new items"	2]
• "qualitative method" [2]
• "marketing strategies"	

 $\begin{array}{c}160\,5\\0\,10\,0\,09\end{array}$

To what extent could the following help <i>JB plc</i> Games & Gadgets store?	when making decisions about the proposed
(a) Product life cycle analysis, when choosing	which products to sell in this store. [6]

Examiner only

(b)

The Wolverhampton labour statistics given in question 4 (email), when deciding how to promote this new store. [6]

Total 40 marks

END OF SECTION A

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Section **B**

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Decision-making and the Production function

At present some of our larger stores sell electronic items, including computers and software. We hope to increase these sales by opening a number of new "Games & Gadgets" stores. We'll buy in a number of these products from a company called PlayTek Ltd. This business has just introduced a new product range, which we're convinced will sell well. We rely on companies such as PlayTek Ltd to supply us with good quality products.

1. Both *PlayTek Ltd* and *JB plc* value stocks using the Average Cost (AVCO) method.

Suggest two advantages to these businesses of using this method of stock valuation. [4]





(a) .	List the main stages in new product development for <i>PlayTek Ltd</i> . [4]	
••••••		
(1)		
(b)	Assess the impact that this new product development will have on the production function of <i>PlayTek Ltd</i> . [6]	
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(a)	What is value analysis?	[2]
(b)	Give two advantages to <i>PlayTek Ltd</i> of using value analysis when designing satnavs other electronic products.	or [4]
		····· •
Vhe	n making the new satnay range, <i>PlayTek Ltd</i> will gain purchasing economies of scale.	
Vhen	n making the new satnav range, <i>PlayTek Ltd</i> will gain purchasing economies of scale. yse why it is important for <i>PlayTek Ltd</i> to gain purchasing economies of scale.	
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Examiner only

5. *PlayTek Ltd* is an electronics manufacturer. A number of other electronics manufacturers are located close to each other in the same area as *PlayTek Ltd*.

Assess the value to *PlayTek Ltd* of being located in an area containing a number of other electronics manufacturers. [6]

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6. *PlayTek Ltd* measures its labour productivity, calculating it using the following formula:

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Examiner only

[2]

Productivity = Quantity produced Number of production employees

The average monthly production and other figures in 2011 for one electronic product were:

Products made	5 328
Number of production employees	37
Production wages	£71 928

(a) Calculate the average monthly labour productivity in **2011**.

In 2012, *PlayTek Ltd* introduced new manufacturing methods that increased average monthly output by 25%. In return, the 37 employees received a pay increase, taking their average monthly wage to £2250 each.

(b) Calculate the average monthly labour productivity in **2012** and review the performance of *PlayTek Ltd*. [6]

Total 40 marks

END OF SECTION B

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Section C

Decision-making and the Finance function



Some of the food and drink in our store restaurants is bought in from suppliers, though we do prepare a lot of food in our kitchens. We have a range of food and drinks we call "Freshly Prepared", which is very popular with our customers. The stores send us their sales and other figures. With my accounting background, I see some of the stores' financial accounts. I'll show you some, to see what you make of them.

1. Jo and her Head Office colleagues calculate labour and materials variances for *JB plc* restaurants. Jo has been given the following information on the Wolverhampton restaurant.

£56.87 adverse

- Labour rate variance
- Labour efficiency variance £32.02 adverse

(a)	Calculate the total labour cost variance for this restaurant. [2]	Examiner only
(b)	Suggest one reason for the labour rate variance and one reason for the labour efficiency variance. [4]	
•••••		

Turn over.

- Examiner only
- 2. *JB plc* has a standard costing system to control the amounts of ingredients that restaurants buy and use. The following is a cost card for the labour and ingredients (materials) used to make flapjacks.

JB plc: Standard cost card for flapjacks		
Standard quantity per bat Standard cost per batch a	ch: s below:	20 flapjacks £4.20
<i>Item</i> Rolled oats Butter, sugar, syrup mix	Amount 1 kg 1.2 kg	Cost £1.20 £3.00 (£2.50 per kg)

Last month at the company's Wolverhampton restaurant, 800 flapjacks (40 batches) were made using the following amounts of ingredients (materials).

Ingredients	Quantity	Cost
Rolled oats	42 kg	£48.30
Butter, sugar, syrup mix	50 kg	£126.00

Calculate the following variances for this product.

• Materials price variance [3]

• Materials usage variance	[3]	Examiner only
	······	
· · · · · · · · · · · · · · · · · · ·		
• Total materials variance	[2]	
	·····•	
	· · · · · · ·	

Turn over.

3. Using the information provided in questions 1, 2 and your responses, analyse the variances and suggest what *JB plc* could do in this situation. Justify the suggestions you make. [6]

• Non-current liabilities (Long-term liabilities)	[2]
Non-current naointies (Long-term naointies)	[4]
• Retained earnings	[2]
Retained carmings	[2]
• Other reserves	[2]
other reserves	[4]

Turn over.

Jo has given you the net assets summary below for two of JB plc's stores. Wolverhampton Stoke 2012 2012 2011 2011 (£000)(£000)(£000) $(\pounds 000)$ 84 Non-current assets (Fixed assets) 140 125 86 **Current assets** 276 Inventories (Stocks) 321 173 198 Trade receivables (Debtors) 4 2 1 4 Cash 3 5 3 3 **Current liabilities** (78)(56)(47) (48)Net current assets 205 274 131 154 Net assets 345 399 217 238 Calculate the following ratios from the above information, to 2 places of decimals: Acid Test [2] • _____ Current [2] •

5.

Examiner only

Jo has calculated the Rate of Inventory turnover (stock turnover) for the Wolverhampton and Stoke stores, for 2012 and 2011. The results of her calculations are as follows. 6. Wolverhampton Stoke 2012 2011 2012 2011 26 Annual turnover rate 30 13 12 Assess the extent to which these ratios and the ratios from question 5 are useful to Jo when reviewing the performance of the two stores. [10] **Total 40 marks**

END OF SECTION C

Examiner only

Section D

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Other decision-making tools



At Head Office, we're planning to introduce a monthly book of recipes we use in our restaurants for customers, which we'll sell in the stores. We've decided to call it "Meals the JB way", but we haven't decided on the selling price. We will print the recipe books "inhouse" at Head Office, which means we have to invest in a new printer and plan this project very carefully. I have some information I'd like you to check.

1. Jo has been given the following estimates for "Meals the JB way".

Option A Expected selling price: £1.25

Expected weekly	Probability of
sales	making these sales
2 500	0.20
1800	0.25
1600	0.25
1 200	0.30

Option B Expected selling price: £1.00

Expected weekly sales	Probability of making these sales	
2500	0.40	
1800	0.35	
1 600	0.20	
1 200	0.05	

The book of recipes is expected to cost 60p per copy to print.

Calculate for Option A and Option B the expected			Examiner only
(a)	total weekly sales (in units)	[4]	
·····			
·····			
(<i>h</i>)	total weekly profit	[4]	
.			
•••••			
·····			
		•••••	

Examiner only

If the "Meals the JB way" project goes ahead, JB plc will link the selling price of the recipe book to a fixed-base index. Jo is familiar with one national index, the Consumer Prices Index (CPI).
Outline the meaning of

fixed-base index

fixed-base index

Consumer Prices Index

Consumer Prices Index

3.

		••••••
•••••••••••••••••••••••••••••••••••••••		••••••
<i>JB plc</i> plans to buy a prin	ing machine to print "Meals the JB way". The mac	hine will co
£134000. Printing the copie	s in-house is expected to generate the following net c	ash.
	£	
Year 1	56000	
Year 2	66000	
Year 3	72000	
Year 4	72,000	
Year 5	72 000	
Calculate the payback peri	od for the printing machine (years and months).	[2
1 2 1		L

Turn over.

|Examiner only

Examiner Compare Internal Rate of Return and Payback as methods of investment appraisal for *JB plc* to use when reviewing the purchase of the printing machine referred to in question **4**. [10] 5. _____

only

6. The "Meals the JB way" project will take a number of months to set up. Jo has been told that only constructing a Gantt chart will help. Although Jo is familiar with critical path analysis (CPA), she has not heard of Gantt charts. Complete the memorandum below to Jo. Your memorandum should: describe the nature and purpose of a Gantt chart [2] outline the similarity between CPA and Gantt charts [2] explain one advantage and one disadvantage of using CPA rather than Gantt charts to • plan the production of "Meals the JB way" recipe books. [4] **MEMO** From: Work Experience student To: Jo **Date: Today Re: Gantt charts**

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Total 40 marks

Examiner

END OF SECTION D

END OF PAPER

Continuation page only	Examiner only
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