

Surname	Centre Number	Candidate Number
Other Names		2



GCE A level

1605/01

APPLIED BUSINESS

UNIT ABUS5

Paper version of on-screen assessment

P.M. THURSDAY, 14 June 2012

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 - 26.**

Time allowed: *Two hours*

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 4
- Section C question 5
- Section D question 3

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	
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	7	
	Total	

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INTRODUCTION

Garden Goods Ltd

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

Garden Goods Ltd (GG Ltd) is a UK company that manufactures and sells a range of gardening products. These products include lawn mowers, garden tools and plastic compost bins.

GG Ltd has two factories, one in England which contains its Head Office and one in Wales, and a separate warehouse.

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



Hello. Thanks for joining us on work experience at our Head Office. We hope you enjoy your time spent with us. My name is Jon Adams, and one of my roles at Garden Goods Ltd is to supervise the work experience people we take on at Head Office.

As you know, at GG Ltd we make and sell equipment and other items bought by gardeners. Most of our products are bought by individuals, although we do make some specialist products bought by commercial growers of food crops.

SECTION A

Decision-making and the Marketing function



Our lawn mowers are one of our best-selling products. We manufacture a wide range of lawn mowers, from small manual cylinder ones designed for the small lawn, to electric ones designed for much larger lawns. Some of the mowers sell well, whilst others are less popular with our customers. As a result, we frequently review how we market the range of mowers.

1. *GG Ltd* manufactures a range of lawn mowers in its factories. Sales of lawn mowers are subject to seasonal variations. You have been given the following information about the 'Low-cut' cylinder model of lawn mower. This forecast is based on the 2010 sales figures shown in the table below.

Quarter (2010)	Sales of the 'Low-cut' cylinder lawn mower (£000)	Seasonal variation* (£000)
1 January-March	21	- 8
2 April-June	37	+ 9
3 July-September	34	+ 7
4 October-December	18	- 8

* Employees of *GG Ltd* use the formula 'Actual minus Trend' to calculate the seasonal variations.

Calculate and describe the sales trend, using the information in the table.

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2. Using the information provided in question 1, forecast the sales value of the 'Low-cut' lawn mower for each quarter of **2012**, and the total sales value for **2012**.

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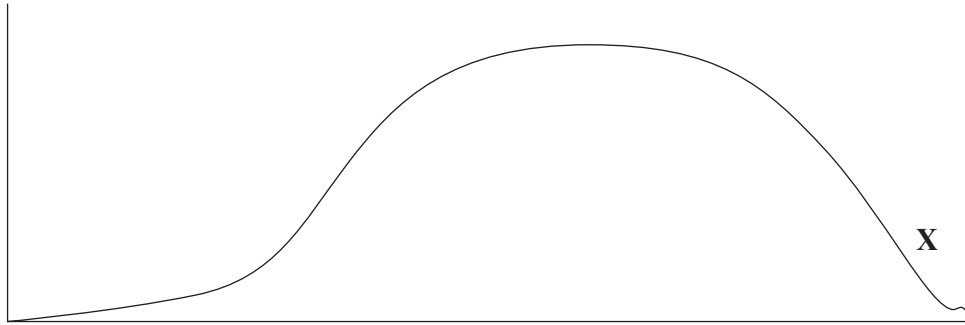
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- 4. You have been given additional information about another lawn mower model, the 'Dragon'. This information, given below, shows the lawn mower's position on the product life cycle diagram.



'X' indicates the stage in the life cycle for the 'Dragon' mower.

Name and describe the key features of the life cycle stage indicated by the lawn mower's position. [4]

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SECTION B

Decision-making and the Production function



We've recently been discussing our product range. Various Project Teams have been set up to review our product lines. The Team that I'm a member of has decided to recommend manufacturing an innovative type of compost bin, which we think will do well if we can control the costs of manufacture.

1. As part of your work experience, Jon has given you a copy of a memorandum he received recently. The memorandum is shown below.

From: Project Leader, Project 12

To: Project Team members

Re: Project 12 – New type of compost bins

The Project 12 Team recognises the influence of increasing globalisation on the work of GG Ltd. Therefore, at its last meeting the Team decided to recommend to the Board that GG Ltd proceeds with this Project. Any decision to proceed will have the following consequences:

1. The Project Team proposes that both the English and Welsh factories will manufacture the new compost bins. It is suggested that this decision be reviewed after an initial 12-month period.
2. The proposed production volume indicates that we will need to buy specialist production equipment instead of manufacturing the new bins using the present machines, which would need adapting for the purpose.
3. To finance the equipment purchase, we will need a bank loan. The Accountant suggests we should be able to negotiate this at a favourable rate compared with the normal market rate.
4. The Team has been advised that the price of the plastics needed in the production process has recently risen, but we hope to reduce or at least control these costs through obtaining bulk buying discounts.

Describe **one** likely “influence of increasing globalisation on the work of *GG Ltd*”.

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Name **two** likely ordering costs and **two** likely holding costs for stock at *GG Ltd*.

- Ordering costs

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- Holding costs

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6. Jon needs to order some rigid plastic sheets, from which the compost bins will be manufactured. He has the following information.

- One plastic sheet provides sufficient plastic for five bins.
- The estimated **monthly** demand will be 750 bins.
- The **annual** cost of holding one plastic sheet is 25p.
- It costs £4 to order one consignment of this stock.

Calculate the EOQ (using the formula provided in question 5), showing your workings.

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7. The directors of *GG Ltd* have decided to manufacture the new line of compost bins. They are aware that stock levels and costs need careful control.

(a) State **four** factors that will influence the directors when setting the maximum stock levels of raw materials used to manufacture the bins. [4]

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(b) Assess the benefit to *GG Ltd* of keeping **low** stock levels. [6]

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Total 40 marks

END OF SECTION B

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SECTION C

Decision-making and the Finance function



Part of my job is to assist the Accounts staff who work at Head Office. My responsibility at present is to help them to review the results of our budgeting. I'm also becoming more involved with financial accounting but I still need to ask for help with some of the information.

1. GG Ltd manufactures a single type of garden fork, and activity levels in the production section where the fork is manufactured vary from week to week. Below is the section's overhead budget, based on an average level of activity of 800 forks a week for the four-week period of April, and the actual results for the four weeks in April together with variances. Jon has calculated the variances and is disappointed with what they seem to show.

	Actual £	Budgeted £	Variance fav/(adv) £
Materials (variable)	9 250	8 800	(450)
Labour (variable)	17 200	16 000	(1 200)
Other variable overheads	5 700	5 600	(100)
Fixed overheads	<u>8 000</u>	<u>8 000</u>	—
	<u>40 150</u>	<u>38 400</u>	<u>(1 750)</u>
Forks manufactured	3 400	3 200	

Using the table below, prepare a flexible budget for the April four-week period based on the manufacture of 3 400 forks, showing appropriate variances. [8]

Cost	Actual £	Budget £	Variance £ fav/(adv)
Materials	9 250		
Labour	17 200		
Other variable overheads	5 700		
Fixed overheads	8 000		
Total costs	40 150		

4. Jon has sent you the following information about *GG Ltd* and a competitor. He has asked you to review the liquidity of *GG Ltd* and *Growalot plc*.

From: Jon Adams	To: Work Experience student	
Please find below some financial information about GG Ltd and one of our main competitors, based on their last financial year.		
Ratio	GG Ltd	Growalot plc
Gearing*	0.4 : 1	1.2 : 1
Receivables (Debtors) Collection Period	30 days	60 days
Payables (Creditors) Collection Period	60 days	30 days
Net Profit Margin	5.5%	6.6%
Return on Capital Employed	7.5%	6.0%
Acid Test Ratio	0.9 : 1	0.6 : 1
Current Ratio	1.8 : 1	1.5 : 1
Asset Turnover	3 times	2 times
Stock Turnover	24 times	12 times

* *GG Ltd* calculates Gearing as Long-term Liabilities divided by Equity (Share Capital)

(a) Using **one** appropriate ratio, analyse the **liquidity** of both companies.

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(b) Analyse the results of **one** appropriate ratio that gives information about the efficiency of these companies when **trading on credit**.

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5. Jon does not understand the terms ‘stock turnover’ and ‘gearing’.

Using the memorandum below, explain to Jon what is meant by ‘stock turnover’ and ‘gearing’, and what the results of the ratios provided in question 4 indicate. [8]

Memorandum

From: Work Experience student

To: Jon Adams

Subject: Meaning of the following terms

Date: Today

• The meaning of stock turnover:

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• The stock turnover ratio indicates:

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• The meaning of gearing:

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• The gearing ratio indicates:

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SECTION D

Other decision-making tools



We're looking to increase sales to remain competitive. The directors have a number of plans for this, including setting up a factory shop on our site for visitors to buy our goods, and investing in new machinery to increase our factory's productivity. I'm involved with this work, and I'd like you to help me.

1. The directors of *GG Ltd* are discussing whether to invest in a new machine. Jon has given you information shown below about the machine, and has asked you to calculate the net present value for this proposed investment.

From: Jon Adams

To: Work Experience Student

Re: Possible purchase of new machine

Here is the information that you will need.

Initial cost of the machine: £200 000

Additional profits and depreciation:	<u>Profits</u>	<u>Depreciation</u>
Year 1	£20 000	£50 000
Year 2	£20 000	£50 000
Year 3	£10 000	£50 000
Year 4	£1 000	£50 000

Additional information:

- The machine will be replaced at the end of year 4 and it is not expected to have any scrap value.
- Depreciation of the machine has been allocated equally to each year, and so **each year's profits have been reduced by the amount of depreciation**. You can therefore easily calculate the cash flows.
- The cost of capital for *GG Ltd* is 10% and the discount factors are as follows.

Year 1	0.909
Year 2	0.826
Year 3	0.751
Year 4	0.683

What is meant by 'net present value'?

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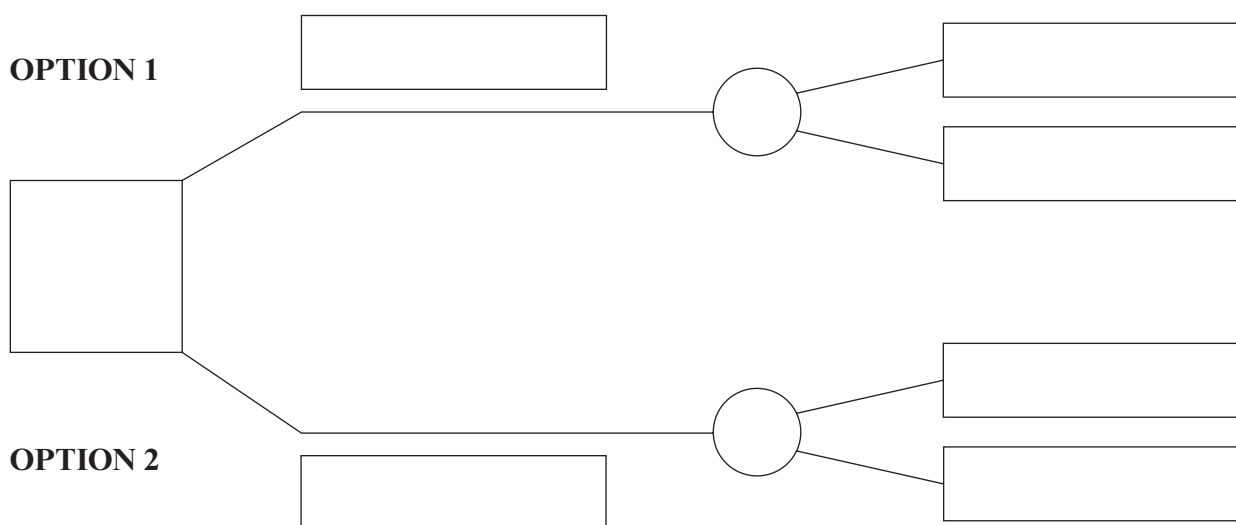
2. Using the information provided in question 1 and the table below, calculate the net present value for the machine. [8]

Year	Cash flow (£)	Discount factor	Present value (£)
Net present value			

4. The directors of *GG Ltd* plan to set up a factory shop, which will sell products manufactured in the adjoining factory. There are two options shown below. For each option the directors have given ‘high’ and ‘low’ probabilities of success for the shop in its first year. Jon needs to construct and use a decision tree for this information.

Option	Cost	High probability of success	Low probability of success
1 Build new premises for the factory shop.	£750 000	55% probability of making £75 000 profit each year	45% probability of making £25 000 profit each year
2 Convert another building to become the factory shop.	£300 000	80% probability of making £60 000 profit each year	20% probability of making £20 000 profit each year

Using the above information, complete the decision tree below showing costs and expected revenues for each option. [6]



5. Using the information from question 4 and your responses, calculate the expected values for each option, and identify which one the directors should select based on your calculations. [3]

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