

Tuesday 29 January 2013 – Afternoon

A2 GCE ACCOUNTING

F014/01/RB Management Accounting

RESOURCE BOOKLET

To be given to candidates at the start of the examination

Duration: 2 hours



INSTRUCTIONS TO CANDIDATES

- The information required to answer questions 1–4 is contained within this Resource Booklet.

INFORMATION FOR CANDIDATES

- Your Quality of Written Communication will be taken into account when marking your answers to the two questions/sub-questions labelled with an asterisk (*).
- In one of these questions, the focus will be on your ability to present numerical information legibly and in an appropriate accounting format. In the other, you will be assessed on the legibility and style of writing, the clarity and coherence of your arguments and the accuracy of your spelling, punctuation and grammar.
- This document consists of **8** pages. Any blank pages are indicated.

INSTRUCTION TO EXAMS OFFICER/INVIGILATOR

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- 1 Ribbon Ltd manufactures two products, both of which are made from the same raw material. It has prepared the following budgeted data for the year ending 31 December 2013.

	Product A	Product B
Selling price (£ per unit)	80	90
Raw material (£ per unit)	30	32
Wages (£ per unit)	15	18
Variable overheads (£ per unit)	15	15
Sales quantity (units)	14 000	11 000

Total fixed costs are £360 000 for the year. These are split equally between each product. All sales occur evenly throughout the year.

REQUIRED

- (a) Based on the original budget calculate the:
- (i) profit for Ribbon Ltd for the year ending 31 December 2013. [4]
 - (ii) break-even in units **and** sales value for Product A. [2]
- (b) Prepare a contribution to sales graph for Product B. [3]
- (c) Since preparing the budget, Ribbon Ltd has been advised by its supplier that, due to a material shortage, it will only receive 85% of its material requirement for the year ending 31 December 2013.
- Calculate the maximum profit Ribbon Ltd can now make for the year ending 31 December 2013. [10]
- (d) (i) Explain the term 'margin of safety'. [2]
- (ii) Assess the usefulness of the margin of safety to a company. [6]
- (e)* Discuss **three** limitations of break-even analysis for decision making. [11]

Total marks [38]

- 2 Grange Manufacturing started in business on 1 January 2011, and the following information is available for its first two years of trading.

	2011	2012
Total fixed costs (£)	30 000	48 000
Total direct materials (£)	150 000	240 000
Total direct labour (£)	100 000	120 000
Total variable overheads (£)	40 000	72 000
Selling price per unit (£)	60	55
Sales quantity (units)	9 500	11 600
Production quantity (units)	10 000	12 000

REQUIRED

- (a)* A statement showing the gross profit for **each** of the two years under the FIFO basis of valuing issues, if the company used the:
- marginal costing approach to valuing stock.
 - absorption costing approach to valuing stock. [17]
- (b) Advise Grange Manufacturing on which method of valuing stock (marginal costing or absorption costing) should be used in its published accounts. Give reasons for your advice. [6]

Total marks [23]

- 3 During 2011 Monty Ltd conducted market research costing £20 000 in order to investigate the potential market for new products. It is now considering two new product developments, only one of which will be undertaken. The estimated profitability of each product is given below.

	Product 63		Product 64	
	£	£	£	£
Annual sales		200 000		250 000
Cost of sales	120 000		150 000	
Administration costs	45 000		30 000	
Depreciation	<u>15 000</u>		<u>30 000</u>	
		<u>180 000</u>		<u>210 000</u>
Net profit		<u>20 000</u>		<u>40 000</u>

It is estimated that the above will continue for each year of each product's life, which is:

Product 63 4 years
Product 64 5 years

The capital cost of product 63 is £65 000 and depreciation is calculated on a straight line basis with an estimated residual value of £5 000 at the end of year 4.

The capital cost of product 64 is £160 000 and depreciation is calculated on a straight line basis with an estimated residual value of £10 000 at the end of year 5.

The capital cost is payable at the start of the product life and the cost of capital is 10%.

Extract from present value table of £1 @ 10%:

Year 1	0.909
Year 2	0.826
Year 3	0.751
Year 4	0.683
Year 5	0.621

REQUIRED

- (a) For each product:
- (i) the net cash flow for year 2. [4]
 - (ii) payback (to two decimal places). Assume even cash flows throughout each year. [4]
 - (iii) net present value. Assume all cash flows take place at the end of each year. [10]
- (b) Discuss **two** limitations of the payback method of capital expenditure evaluation. [6]

Total marks [24]

4 JAR plc has estimated the following factory indirect costs for its next financial year.

	£
Indirect wages	900 000
Repairs and maintenance of machinery	150 000
Canteen	62 000
Insurance of machinery	41 000
Insurance of premises	32 000
Depreciation of machinery	30 000
Heating and lighting	38 000
Consumables	<u>12 500</u>
	<u>1 265 500</u>

The management accountant wishes to calculate a suitable overhead absorption rate for each of the two production departments and the following information is available:

	Production Departments		Service Departments	
	Machining	Assembly	Maintenance	Canteen
Machine cost (£)	300 000	100 000	–	–
Direct machine hours	380 000	20 000	–	–
Direct labour hours	50 000	250 000	–	–
Premises area (square metres)	10 800	9 600	2 400	1 200
Number of employees	75	96	20	9
Consumables (£)	6 200	3 490	1 600	1 210

The proportion of work carried out by the service departments is:

	Machining	Assembly	Maintenance	Canteen
Maintenance (%)	80	20	–	–
Canteen (%)	40	45	15	–

The actual results for the year were as follows:

	Machining	Assembly
Factory indirect costs (£)	690 000	577 000
Direct machine hours	370 000	19 600
Direct labour hours	52 000	260 000

REQUIRED

- (a) The overhead absorption rate for each of the production departments, using the machine hour rate for the machining department and the labour hour rate for the assembly department. [20]
- (b) Using the actual figures provided, calculate the amount of overhead which would be over or under absorbed by each production department. [6]
- (c) Discuss how an inaccurate rate of overhead absorption can adversely affect the profits of a business. [9]

Total marks [35]

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