



EXAMINATIONS 2012 / 2013

ARHOLIADAU 2012 / 2013

Semester 2

FACULTY OF: Business and Management

NAME OF COURSE/PROGRAMME:	Business Portfolio
YEAR OR LEVEL:	3 / 6
NAME OF MODULE/UNIT/EXAM PAPER:	Contemporary Issues in Management Accounting
MODULE NO:	M3X9077
DATE OF EXAMINATION:	Friday, 24th May 2013
EXAMINATION TIMES:	
START TIME:	12.00pm
FINISH TIME:	3.00pm
TIME ALLOWED:	3 hours

INSTRUCTIONS TO CANDIDATES:

- Answer any **FOUR** of the **FIVE** questions contained in this paper. All questions carry equal marks.
- Graph paper will be provided

QUESTION ONE

Liberty Valance Products plc. has devolved decision making to the operating divisions of the company, and wishes to be assured that decisions are being taken properly in accordance with company policy.

As a check on existing practice, it has been decided to investigate a recent decision to increase the price of the only product of division Alpha to £14.50 per unit due to rising costs.

The following information and estimates were available for the management of division Alpha:

- (1) Last year, 75,000 units were sold at £12 each with a total unit cost of £9, of which £6 were variable costs.
- (2) For the year ahead, the following cost and demand estimates have been made:

	Unit variable costs:		Total fixed costs:	
Outcomes:	Probabilities:	Cost per unit.	Probabilities:	
Optimistic.	0.20	£6.20	0.20	Increase by 10%
Most Likely.	0.65	£6.50	0.50	Increase by 25%
Pessimistic.	0.15	£7.00	0.30	Increase by 50%

Demand estimates at various prices (per unit):			
		Price per unit:	
Outcomes:	Probabilities:	£13.50	£14.50
Optimistic.	0.20	70,000	68,000
Most Likely.	0.50	60,000	55,000
Pessimistic.	0.30	45,000	35,000

Note: Unit variable costs, fixed costs and demand estimates are statistically independent of each other.

For this type of decision, Liberty Valance has decided to choose the option which has the highest expected outcome with at least an 80% chance of breaking even.

Required:

- (a) Assess whether the decision was made in accordance with Liberty's guidelines. **(15 marks)**
- (b) Comment on the estimates for the decision, and describe what other factors might have been considered. **(6 marks)**
- (c) Explain what Liberty's attitude is to risk as evidenced by the guidelines. **(4 marks)**
- (TOTAL 25 MARKS)**

QUESTION TWO

Alamo plc. is experiencing difficulty in producing its budgets, it finds it necessary to try and quantify the learning effect from new products introduced. Substantial product changes occur and result in the need for retraining.

An order for 30 units of a new product has been received by Alamo plc. So far, 14 have been completed; the first unit required 40 direct labour hours and a total of 240 direct labour hours has been recorded for the 14 units.

The production manager expects an 80% learning effect for this type of work.

Alamo uses standard absorption costing. The direct costs attributed to the centre in which the unit is manufactured and its direct material costs are as follows:

Direct material	£30.00 per unit
Direct labour	£6.00 per hour
Variable overhead	£0.50 per direct labour hour
Fixed overhead	£6,000 per four-week operating period

There are ten direct employees working a five-day week, eight hours per day.

Personal and other downtime allowances account for 25% of the total available time.

The company usually quotes a four-week delivery period for orders.

You are required:

- (i) to determine whether the assumption of an 80% learning effect is a reasonable one in this case by using the standard formula $y = ax^b$;

(7 marks)

- (ii) to calculate the number of direct labour hours likely to be required for an expected second order of an additional 20 units;

(7 marks)

- (iii) to use the cost data given to produce an estimated product cost for the initial order, examining the problems which may be created for budgeting by the presence of the learning effect.

(11 marks)

(TOTAL 25 MARKS)

QUESTION THREE

Rio Grande Ltd produces portable hard drives for laptops and tablets. It operates a standard costing system using absorption costing.

The standard costs for one product are shown below:

		£
Direct material	3 kg. at £5 per kg.	15
Direct labour	2 hours at £7 per hour	14
Variable overhead	2 hours at £3 per hour	<u>6</u>
Total variable cost		35
Fixed overhead	2 hours at £6 per hour	<u>12</u>
Total product cost		47
Standard selling price		<u>70</u>
Standard profit margin		<u>23</u>

The budgeted output and sales was 1,000 units

Actual output for the period was 1,400 units and actual sales for the period was 1,200 units.

Actual cost and revenue were as follows:

		£
Direct material	4,500 kg., costing	21,700
Direct labour	2,850 hours, costing	20,000
Variable overhead		6,800
Fixed overhead		13,000
Sales revenue	1,200 units at £65 per unit	78,000

Required:

- (a) A statement reconciling the budget profit with the actual profit - detailing all variances.

(15 marks)

- (b) Prepare a report based on your calculations/ statement in (a) above detailing the expected management action that might be necessary to attempt to deal with the variances, you may choose any 5 variances you consider appropriate.

(10 marks)

(TOTAL 25 MARKS)

QUESTION FOUR

ACTIVITY BASED TECHNIQUES

The basic ideas justifying the use of Activity based costing (ABC) and Activity-based budgeting (ABB) are well publicised, and the number of applications has increased. However, there are apparently still significant problems in changing from existing systems.

Required:

- (a) Explain which characteristics of an organisation, such as its structure, product range, or environment, may make the use of activity based techniques particularly useful. **(6 marks)**
- (b) Explain the problems that may cause an organisation to decide not to use, or to abandon use of, activity-based techniques. **(10 marks)**
- (c) Some categorisations of cost drivers provide hierarchical models:
 - (i) unit-level activities,
 - (ii) batch activities,
 - (iii) product sustaining activities,
 - (iv) facility sustaining activities.Other analyses focus on 'value adding' and 'non-value adding' activities.

Required:

Explain what is meant by 'non-value adding activities', and discuss the usefulness of this form of analysis.

(9 marks)

(TOTAL 25 MARKS)

QUESTION FIVE

'Japanese companies that have used just-in-time (JIT) for five or more years are reporting close to a 30% increase in labour productivity, a 60% reduction in inventories, a 90% reduction in quality rejection rates, and a 15% reduction in necessary plant space. However, implementing a just-in-time system does not occur overnight. It took Toyota over twenty years to develop its system and realise significant benefits from it.'

Source: Sumer C Aggrawal, Harvard Business Review (9/85)

You are required:

- (a) to explain how the benefits claimed for JIT in the above quotation are achieved and why it takes so long to achieve those benefits. **(15 marks)**
- (b) to explain how management information systems in general (and management accounting systems in particular) should be developed in order to facilitate and make best use of JIT. **(10 marks)**

(TOTAL 25 MARKS)