



EXAMINATIONS 2012 / 2013

ARHOLIADAU 2012 / 2013

Semester 2

FACULTY OF: Business and Management

NAME OF COURSE/PROGRAMME:	BA Business Portfolio
YEAR OR LEVEL:	Year 2
NAME OF MODULE/UNIT/EXAM PAPER:	Cost Control and Performance Management
MODULE NO:	M2X9052
DATE OF EXAMINATION:	Tuesday, 21st May 2013
EXAMINATION TIMES:	
START TIME:	11.30am
FINISH TIME:	2.30pm
TIME ALLOWED:	3 hours

INSTRUCTIONS TO CANDIDATES:

- **Answer any FOUR of the FIVE questions contained in this paper. All questions carry equal marks.**
- **One copy of Process Costing Format provided**

QUESTION ONE

Swansea Jack is able to produce four products and is planning its production mix for the following period. Relevant data is given below:

<i>Product:</i>	<u>A.</u>	<u>B.</u>	<u>C.</u>	<u>D.</u>
Selling price (£) per unit	38	50	80	100
Labour cost per unit (£)*	12	24	36	48
Material cost per unit (£)	18	18	30	32
Maximum demand (units)	1,000	5,000	4,000	2,000

*Labour is paid £12 per hour.

Required:

- (i) Calculate for each of the four products the contribution per unit and the c/s ratio
(8 marks)
- (ii) Based on the maximum demand, calculate the total contribution arising from the sales of the four products.
(7 marks)
- (iii) If labour is limited to 16,000 hours in the period, what is the maximum contribution the company can earn?
(10 marks)

(TOTAL 25 MARKS)

QUESTION TWO

A company requires 2,000 units of material X per month, (annually 24,000 units). The cost per order is £60 regardless of the size of the order. The holding costs are £12.00 per unit per annum.

Required:

- (i) Investigate the total cost of buying the stock in quantities of 300, 400, 500, 600, 800, or 1,000 units at one time. What is the cheapest option?
(12 marks)
- (ii) Using the formula calculate the Economic Order Quantity (EOQ).
(8 marks)
- (iii) What do you understand by the terms ordering costs and holding costs, give examples of each.
(5 marks)

(TOTAL 25 MARKS)

QUESTION THREE

One of the products manufactured by Townhill Ltd passes through two separate processes. In each process, losses arising from rejected material occur.

In Process 1, normal losses are 20% of input. In Process 2, normal losses are 10% of input. The losses arise at the end of each of the processes. Reject material can be sold. Process 1 reject material can be sold for £1.20 per kilo, and Process 2 reject material for £1.42 per kilo.

Information for a period is as follows:

Process 1:

Material input 9,000 kilos, cost £14,964.
Direct labour 2,450 hours at £3.40 per hour.
Production overhead £2.60 per direct labour hour.
Material output 7,300 kilos.

Process 2:

Material input 7,300 kilos.
Direct labour 1,000 hours at £3.40 per hour.
Production overhead £2.90 per direct labour hour.
Material output 4,700 kilos.

At the end of the period 2,000 kilos of material were incomplete in Process 2. These were 50% complete as regards direct labour and production overhead.

There was no opening work-in-process in either process, and no closing work-in-process in Process 1.

You are required to prepare the relevant process accounts for the period (5 marks each):

Process 1. Account.
Process 2. Account.
Normal Loss Account.
Abnormal Gain.
Abnormal Loss.

(TOTAL 25 MARKS)

QUESTION FOUR

The annual flexible budget of Gower limited is as follows:

Production capacity	40%	60%	80%	100%
Costs:	£	£	£	£
Direct labour	16,000	24,000	32,000	40,000
Direct material	12,000	18,000	24,000	30,000
Production overhead	11,400	12,600	13,800	15,000
Administration overhead	5,800	6,200	6,600	7,000
Selling and distribution overhead	6,200	6,800	7,400	8,000
	£51,400	£67,600	£83,800	£100,000

Owing to trading difficulties the company is operating at 50% capacity. Selling prices have had to be lowered to what the directors maintain is an uneconomic level and they are considering whether or not their single factory should be closed down until the recession has passed.

A market research consultant has advised that in about 12 months' time there is every indication that sales will increase to about 75% of normal capacity and that the revenue to be produced in the second year will amount to £90,000. The present revenue from sales at 50% capacity would amount to only £49,500 for a complete year.

If the directors decide to close down the factory for a year it is estimated that:

- (a) the present fixed costs would be reduced to £11,000 per annum
- (b) closing down costs (redundancy payments, etc) would amount to £7,500
- (c) necessary maintenance of plant would cost £1,000 per annum
- (d) on re-opening the factory, the cost of overhauling plant, training and engagement of new personnel would amount to £4,000.

Required:

Prepare a statement for the directors of Gower Limited, presenting the information in such a way as to indicate whether or not it is desirable to close the factory.

(TOTAL 25 MARKS)

QUESTION FIVE

Duplex Products Limited makes and sells two products, Beta and Gama. The following information is available for period 3:

	<i>Beta</i>	<i>Gama</i>
Production (units)	2,500	1,750
Sales (units)	2,300	1,600

Financial data:

	<i>Beta</i>	<i>Gama</i>
	£	£
Unit selling price	90	75
Unit cost:		
Direct materials	15	12
Direct labour	18	12
Variable production overheads	12	8
Fixed production overheads	30	20
Variable selling overheads	1	1

Fixed production overheads for the period were £105,000 and fixed administration overheads were £27,000.

Required:

- (a) Prepare a profit and loss account for period 3 based on marginal cost principles.

(10 marks)

- (b) Prepare a profit and loss account for period 3 based on absorption cost principles.

(10 marks)

- (c) Reconcile the two profit figures in (a) and (b).

(5 mark)

(TOTAL 25 MARKS)