

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

DEPARTMENT OF ACCOUNTING

SECOND SEMESTER EXAMINATION AUGUST 2009

MANAGEMENT AND COST ACCOUNTING II CAC 2205

TIME ALLOWED: 3 HOURS

INSTRUCTIONS TO CANDIDATES

- i. Answer all **four** questions
- ii. Begin each question on a new page

QUESTION	TOPIC	MARKS
1	BUDGETING	25
2	BREAKEVEN ANALYSIS	25
3	DECISION TREES	25
4	VARIANCE ANALYSIS	25

QUESTION 1 (25 MARKS)

The following information, relates to The Magic Co Ltd, for the second half of 2008:

- a) The magic sells at \$40 and has a variable cost of \$26 made up as follows: Materials \$20, Labour \$4; Overhead \$2
- b) Fixed costs amount to \$6000 per month and are paid on the 25th of each month.
- c) Quantities sold (or to be sold) on credit are:

May	June	July	Aug	Sept	Oct	Nov	Dec	Jan
1000	1200	1400	1600	1800	2000	2200	2600	2400

- d) Production quantities:
The company produces goods one month before they are sold. The demand for the product fluctuates and the company therefore decides to increase and decrease stocks to cater for this fluctuation in the following way:

Month	Aug	Sept	Oct	Nov	Dec
Increase /(decrease) In production	200	400	400	(200)	(200)

- e) Cash sales, at a discount of 5% are expected to average 100 a month.
- f) Customers are expected to settle their accounts by the end of the Second month following sale.
- g) Suppliers of material are paid two months after the materials are used Production.
- h) Wages are paid in the same month as the magic lights are produced.
- i) 70% of the variable overhead is paid in the month of production, and the remainder in the following month.
- j) Corporation tax of \$18000 is to be paid in October.
- k) A new delivery vehicle was bought in June, the cost of which (\$8000) is to be paid in August. The old vehicle was sold for \$600, the buyer undertaking to pay in July.
- l) The company is expected to be \$3000 overdrawn at the bank at 30 June 2008.

REQUIRED

Prepare month by month cash budget for the second half of 2008.

QUESTION 2 (25 MARKS)

PUZZLED LIMITED

Puzzled limited would like to increase its sales during the year to 31 December 2009

To do so it has several mutually exclusive options open to it.

1. Reduce the selling price per unit by 15%
2. Improve the product resulting in an increase in the variable cost per unit of \$1.30
3. Spend \$15000 on advertising campaign
4. Improve factory efficiency by purchasing more machinery at a fixed extra annual cost of \$22500

During the year to 31 December 2008 the company sold 20000 units and the cost revenue details were as follows:

	\$
Sales	200 000
Variable costs	<u>150 000</u>
Contribution	50
Fixed costs	<u>40 000</u>
Profit	<u>10 000</u>

These cost relationships are expected to hold in 2009

REQUIRED

- a) State which option you would recommend and why (use breakeven analysis)
(16 marks)
- b) What are the advantages of breakeven charts. **(4 marks)**

Question 3 (25 marks)

A software company has just won a contract worth \$80000 if it delivers a successful product on time but only \$40 000 if this is late. It faces the problem now of whether to produce the work in house or to sub contract it To sub contract the work would cost \$50 000 but the local sub contract is so fast and reliable as to make it certain that successful software is produced on time

If the work is produced in house the cost would be only \$20 000 but based on past experience would have only 90% chance of being successful .In the event of the software not being successful there would be insufficient time to re write the whole package internally but there would still be the options of either a ‘ late rejection ‘ of the contract (at a further cost of \$10 000) or of ‘late sub- contracting ‘the work on the same terms as before. With this late start the local sub- contractor is estimated to have only a 50/50 chance of producing the work on time or of producing it late. In this case the sub – contractor still has to be paid \$50 000 regardless of whether he meets the deadline or not.

REQUIRED

- a) Draw a decision tree for the software company, using squares for decision points and circles for outcome (chance) points including all relevant data on the diagram.
- b) Calculate expected values as appropriate and recommend a course of action to the software company with reasons.

QUESTION 4 (25 MARK)

New style furniture ltd manufacture a lounge chair by subjecting plasticised metal to a moulding process thereby producing the chair in one piece.

- a) You are provided with the information below. You are required to analyse the cost and sales. **(20 marks)**

Standard /Budget data

Unit variable costs:

Direct material	6 lkg at \$0.50cents per kg
Direct labour	2 hours at \$1.60 per hour
Variable overhead	\$0. 60 per direct labour hour

Budgeted fixed overhead for the year (240 working days) \$30 000

Budgeted production /sales for the year were 60 000chairs standard selling price per chair \$10.00

