

EXAMINATION NO. _____

THE PUBLIC ACCOUNTANTS EXAMINATION
COUNCIL OF MALAWI

2013 EXAMINATIONS

FOUNDATION STAGE

PAPER 3 : MANAGEMENT INFORMATION

WEDNESDAY 5 JUNE 2013

TIME ALLOWED: 3 HOURS

9.00 AM - 12.00 NOON

INSTRUCTIONS: -

1. You are allowed **15 minutes** reading time **before the examination begins** during which you should read the question paper and, if you wish, make annotations on the question paper. However, you will **not** be allowed, **under any circumstances**, to open the answer book and start writing or use your calculator during this reading time.
2. Number of questions on paper - 7.
3. This paper is divided into Sections **A** and **B**.
4. **SIX** questions **ONLY** to be answered as follows:-

SECTION A - Question 1 is divided into parts a – t. This is a compulsory multiple choice question and **MUST** be attempted. Indicate the correct answer for each part by circling (i), (ii), (iii) or (iv) on the specially prepared answer sheet. Fasten the answer sheet to the main answer book.
5. **SECTION B** – Answer any **FIVE** questions from this Section.
6. Formulae Sheet, Graph Paper and Financial Tables are provided.
7. This question paper must **not** be removed from the examination hall.
8. **DO NOT OPEN THIS PAPER UNTIL YOU ARE INSTRUCTED BY THE INVIGILATOR**

This question paper contains 10 pages

SECTION A

This question is a compulsory multiple choice question.

Answer ALL parts of this question

1. (a) Which of the following is **not** a hardware component of a computer?
- (i) Mouse;
 - (ii) Database;
 - (iii) Modem;
 - (iv) Keyboard.
- (b) The ordering quantity which minimizes the balance of cost between inventory holding costs and re-order costs is called:
- (i) Re-order quantity;
 - (ii) Buffer stock;
 - (iii) Free stock;
 - (iv) Economic Order Quantity (EOQ).
- (c) In periods of rising prices (inflation), product costs are understated and profits are overstated. This is true of:
- (i) First In First Out (FIFO);
 - (ii) Last In First Out (LIFO);
 - (iii) Average price ;
 - (iv) Replacement price.
- (d) In information systems, Wide Area Network stands for:
- (i) a well established network for local network access;
 - (ii) a device that allows computers to access information from other computers;
 - (iii) a network that covers large geographical distances ;
 - (iv) the internet which is linked in a multimedia form.

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- (e) A random variable whose observation can take any value in an interval which is said to generate continuous data, and that any value between a lower and upper limit is valid is called:
- (i) continuous data;
 - (ii) random data;
 - (iii) ratio-scaled data;
 - (iv) discrete data.
- (f) Marginal costing gives a different profit to absorption costing when:
- (i) all production costs are fixed;
 - (ii) all production costs are variable;
 - (iii) opening and closing stocks are different;
 - (iv) there are no opening or closing stocks.
- (g) The margin of safety is:
- (i) the difference between budgeted sales and the breakeven sales;
 - (ii) the difference between actual sales and budgeted sales;
 - (iii) sales minus variable costs;
 - (iv) the difference between zero sales and breakeven sales.
- (h) Direct wages should always be classified:
- (i) as variable costs;
 - (ii) according to their actual behaviour;
 - (iii) as semi-fixed costs;
 - (iv) as fixed costs.
- (i) A unit of product or service to which costs can be related is known as:
- (i) a cost centre;
 - (ii) a cost unit;
 - (iii) a product unit;
 - (iv) a service unit.

- (j) A cost which is unaffected in total by increases or decreases in the volume of output is called:
- (i) stepped – fixed cost;
 - (ii) variable cost;
 - (iii) fixed cost;
 - (iv) constant cost.
- (k) A function or department of an organization that is headed by a manager who has direct responsibility for its performance is called:
- (i) a profit centre;
 - (ii) an investment centre;
 - (iii) a cost centre;
 - (iv) a responsibility centre.
- (l) A difference between planned and actual results which results in the organization having less money than forecast is called:
- (i) an adverse variance;
 - (ii) a loss;
 - (iii) a profit;
 - (iv) a favourable variance.
- (m) Which of the following would be classified as a fixed cost in the operation of a motor vehicle?
- (i) oil change every 10,000 kilometres;
 - (ii) petrol;
 - (iii) tyre replacement;
 - (iv) insurance.

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- (n) A translation programme which creates a machine code version of a complete program written in a high level language is called :
- (i) an interpreter;
 - (ii) a compiler;
 - (iii) a multiplier;
 - (iv) a cobol.
- (o) A process of detecting errors in a computer program and getting rid of them is called:
- (i) compiling;
 - (ii) booting;
 - (iii) debugging;
 - (iv) assembling.
- (p) The most frequently occurring value in a set of data is called :
- (i) mean;
 - (ii) mode;
 - (iii) median;
 - (iv) standard deviation.
- (q) What is the name given to the costing method where the cost of goods sold and the value of closing inventory include an element of indirect costs or overheads?
- (i) absorption costing;
 - (ii) activity based costing;
 - (iii) marginal costing;
 - (iv) apportionment costing.

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- (r) A system where the amount paid per unit increases as the individual's production increases is known as:
- (i) shift work;
 - (ii) idle time work;
 - (iii) differential piecework;
 - (iv) bonus scheme.
- (s) What term is used to describe charging an item of overhead expenditure in its entirety to one specific cost centre?
- (i) absorption;
 - (ii) apportionment;
 - (iii) re-apportionment;
 - (iv) allocation.
- (t) What would be the most appropriate basis for apportioning machinery insurance costs to cost centres within a factory?
- (i) value of machinery;
 - (ii) floor space occupied by the machinery;
 - (iii) number of machines;
 - (iv) operating hours of machinery.

**1 Mark each
(TOTAL : 20 MARKS)**

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SECTION B**Answer FIVE questions ONLY from this Section**

2. (a) Two products, X and Y, are produced from the same material. The material costs K950 per kg and the products appear after Process 1.

X can be sold directly but Y needs further processing on Process 2. The following data relate to one period:

Process	Materials K,000	Labour K'000	Overheads K'000	Total K'000
1	1,440	210	150	1,800
2	-	100	180	280
	<u>1,440</u>	<u>310</u>	<u>330</u>	<u>2,080</u>

Product	Kgs sold	Closing stock (Kgs)	Sales (K)
X	300,000	150,000	525,000
Y	450,000	-	1,507,500

There were no materials on hand at the end of the period.

Required:

Calculate the following:

- (i) The unit price of X and its market value at split-off point. **3 Marks**
- (ii) The total joint cost to be apportioned between the two products and notional sales value at split-off point. **3 Marks**
- (iii) The total cost of X and Y using the sales value method of apportionment. **3 Marks**
- (b) Distinguish between **joint products** and **by-products**. **4 Marks**
- (c) Describe the accounting treatment of by-products. **3 Marks**

(TOTAL : 16 MARKS)

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3. (a) The budgeted information for Zeta Ltd for the month of October 2013, analyzed by product, is shown below:

	Product 1	Product 2	Product 3
Sales units (000s)	225	376	190
Selling price (K per unit)	11.00	10.50	8.00
Variable costs (K per unit)	5.80	6.00	5.20
Attributable fixed costs (K'000s)	275	337	296

General fixed costs, which are apportioned to products as a percentage of sales, are budgeted at K1,668,000.

Required:

- (i) Calculate the budgeted profit of **each** of the products produced by Zeta Ltd. **6 Marks**
- (ii) Re-calculate the budgeted profit of Zeta Ltd on the assumption that Product 3 is discontinued, with no effect on the sales of the other two products. **2 Marks**
- (iii) Additional advertising, to that included in the budget for Product 1, is being considered.

Calculate the minimum extra sales units required of Product 1 to cover the additional advertising expenditure of K156,000. (Assume that all other existing fixed costs would remain unchanged). **3 Marks**

- (b) State any **five** major assumptions behind the Cost Profit Volume (CVP) analysis. **5 Marks**
(TOTAL: 16 MARKS)

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4. (a) Bengo Ltd has investigated the possibility of investing in a new machine. The following data have been extracted from the report relating to the project:

Cost of machine on 1 October 2013 is K15,000,000

Life is 4 years to 30 September 2017

Estimated scrap value is K3,500,000 at the end of the life of the machine

Depreciation method is straight line

Year ending	Accounting profit after tax and depreciation K
30 September 2014	1,000,000
30 September 2015	2,500,000
30 September 2016	2,500,000
30 September 2017	2,000,000

The company's rate of return is 15%.

You should assume the following:

- (1) That annual cash flows arise on the anniversaries of the initial outlay, and that there will be no price changes over the project's life. The project's net annual cash flows in the year ending 30 September 2018 will be K500,000.
- (2) That the expected net annual cash flows exclude the initial cost of the machine.
- (3) That accounting profit less tax and depreciation is equal to cash flow.

Required:

Calculate:

- (i) the machine's net present value. **9 Marks**
- (ii) Calculate the machine's payback period. **3 Marks**

- (b) State **four** reasons why cash flows are used for investment appraisal purposes. **4 Marks**

(TOTAL: 16 MARKS)

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5. (a) Tito Ltd makes and sells one product, the standard production cost of which is as follows for one unit:

	K
Direct labour: 3 hours at K30 per hour	90
Direct materials : 4 kilograms at K35 per kg	140
Production overhead : Variable	15
Fixed	<u>100</u>
Standard production cost	<u>345</u>

Normal output is 160,000 units per month and this figure is used for the fixed production overhead calculation.

Costs relating to selling, distribution and administration are:

Variable	20% of sales
Fixed	K960,000 per month

The only variance is a fixed production overhead volume variance. There are no units in the finished goods stock at 1 June 2013. The fixed overhead expenditure is spread evenly throughout the year. The selling price per unit is K700.

For the month of June 2013, the number of units to be produced and sold are budgeted as follows:

Production	170,000
Sales	150,000

Required:

- (i) Prepare a statement for management showing sales, costs and profits for the month of June 2013 using absorption costing. **7 Marks**
- (ii) Prepare a statement for management showing sales, costs and profits for the month of June 2013 using marginal costing. **4 Marks**
- (iii) Prepare an explanatory statement reconciling the profit using absorption costing with the profit using marginal costing. **1 Mark**
- (b) State **four** arguments in support of absorption costing principles in a routine costing system of an organisation. **4 Marks**

(TOTAL : 16 MARKS)

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6. (a) The duration of telephone calls made by a salesman were recorded for a month. The results are shown below:

Duration in minutes	Number of calls
Under 3	30
3 and under 6	60
6 and under 9	40
9 and under 12	20
12 and under 15	15
15 and under 18	10
18 and over	0

Required:

Calculate:

- (i) the arithmetic mean of the durations of these calls. **3 Marks**
 (ii) the standard deviation of the durations of these calls. **4 Marks**

- (b) State:

- (i) **three** advantages of the arithmetic mean. **3 Marks**
 (ii) any **three** main properties of the standard deviation. **3 Marks**
 (iii) any **two** main properties of the range as a measure of dispersion.

2 Marks

(TOTAL: 15 MARKS)

7. (a) Distinguish between batch processing and on-line processing of data for computer applications. **4 Marks**

- (b) State any **four** features of on-line processing. **4 Marks**

- (c) State any **four** features of **each** of the following measures of statistical dispersion:

- (i) mode; **4 Marks**

- (ii) median. **4 Marks**

(TOTAL : 16 MARKS)

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