

EXAMINATION NO. _____

THE PUBLIC ACCOUNTANTS EXAMINATION
COUNCIL OF MALAWI

2013 EXAMINATIONS

FOUNDATION STAGE

PAPER 3 : MANAGEMENT INFORMATION

WEDNESDAY 4 DECEMBER 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

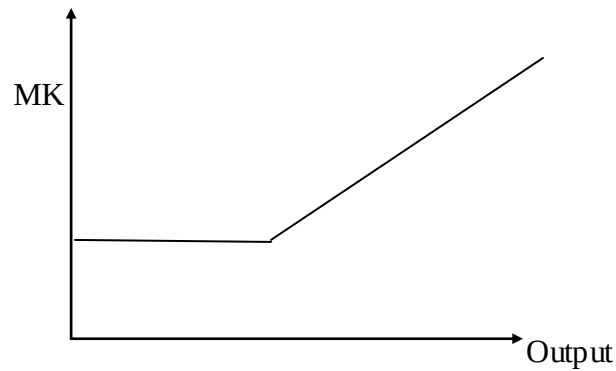
1. (a) An independent variable is best described as:
- (i) a variable that changes in response to time;
 - (ii) a variable that changes in response to changes in other variables;
 - (iii) a variable that does not change with time;
 - (iv) a variable that causes changes to a dependent variable or variables;
- (b) A sample which is selected in such a way that every item in the population has an equal chance of being included is called:
- (i) systematic sample;
 - (ii) random sample;
 - (iii) stratified sample;
 - (iv) quota sample.
- (c) Prime costs include:
- (i) direct labour, direct materials and direct expenses;
 - (ii) all direct costs plus factory overheads;
 - (iii) direct materials plus total overheads;
 - (iv) direct labour plus factory overheads.
- (d) Overhead absorption is done so that:
- (i) common costs are shared among cost centres, in proportion to the benefit received;
 - (ii) the total amount of overheads for the firm can be calculated;
 - (iii) each unit of the product carries a share of overheads;
 - (iv) the total overheads for a cost centre can be calculated.

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- (e) A production worker is paid a salary of K75,000 per month, plus an extra 20 tambala for each unit produced during the month. This labour cost is best described as:
- (i) variable cost;
 - (ii) semi-variable cost;
 - (iii) fixed cost;
 - (iv) step cost.
- (f) In a period of rising prices, which one of the following statements will be true with a FIFO system of costing inventory when compared to LIFO?
- (i) product costs are understated and profits overstated;
 - (ii) product costs are overstated and profits understated;
 - (iii) product costs are overstated and profits overstated;
 - (iv) product costs are understated and profits understated.
- (g) Which of the following options describes an activity (volume) variance?
- (i) the actual efficiency in which resources are used being different to budgeted efficiency;
 - (ii) the actual cost pricing being different to budgeted cost price;
 - (iii) the budgeted efficiency in which resources are being used different to actual efficiency;
 - (iv) the actual quantity produced being different to budgeted production volume.

Continued/.....

(h) Study the labour cost graph below:



The graph depicts:

- (i) a straight piece rate scheme;
- (ii) a straight time rate scheme;
- (iii) a piece rate scheme with a minimum guarantee wage;
- (v) a differential piece rate scheme.

(i) Which of the following costing methods is most likely to be used by a company involved in the manufacture of liquid soap?

- (i) batch costing;
- (ii) service costing;
- (iii) process costing;
- (iv) job costing.

(j) Which of the following is **not** a functional budget?

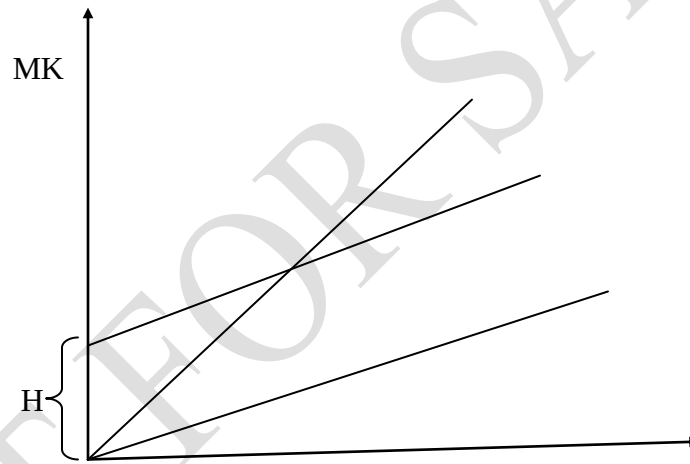
- (i) production budget;
- (ii) cash budget;
- (iii) selling cost budget;
- (iv) distribution cost budget.

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(k) What is an attainable standard?

- (i) a standard which includes no allowance for losses, waste and inefficiencies. It represents the level of performance which is attainable under perfect operating conditions;
- (ii) a standard which is based on currently attainable operating conditions;
- (iii) a standard which is kept unchanged, to show the trends in costs;
- (v) a standard which includes allowance for losses, waste and inefficiencies. It represents the level of performance which is attainable under efficient operating conditions.

Study the following graph which relates to questions (l) and (m) below.



(l) H on the graph indicates the value of:

- (i) contribution;
- (ii) sales value;
- (iii) fixed cost;
- (iv) variable cost.

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- (m) This graph is known as:
- (i) profit-volume chart;
 - (ii) contribution breakeven chart;
 - (iii) conventional breakeven chart;
 - (iv) semi-variable cost chart.
- (n) You are currently employed as a management accountant in an insurance company. You are contemplating starting your own business. In considering whether or not to start your own business, your current salary would be:
- (i) a sunk cost;
 - (ii) an incremental cost;
 - (iii) an irrelevant cost;
 - (iv) an opportunity cost;
- (o) Check digit verification:
- (i) is a method of making code numbers self checking;
 - (ii) enables codes to be self-indexing;
 - (iii) is the encoding of invoices with internal codes;
 - (iv) is the process of checking invoices for correct calculations.
- (p) Which of the following is not a valid spreadsheet cell input?
- (i) number;
 - (ii) text;
 - (iii) graph;
 - (iv) formula.

Continued/.....

- (q) Which of the following is a disadvantage of pie charts?
- (i) They do not show differences in the elements of two different totals ;
 - (ii) They do not show the absolute sizes of elements in a total;
 - (iii) They do not show the relative sizes of elements in a total;
 - (iv) The trend line is difficult to estimate.
- (r) A file containing information on transactions that is used to update the master file is called:
- (i) a master file;
 - (ii) a backup file;
 - (iii) a reference file;
 - (iv) a transaction file.
- (s) The Economic Order Quantity (EOQ) is the order quantity that:
- (i) minimizes carrying costs;
 - (ii) minimizes the total of ordering costs and stock out costs;
 - (iii) minimizes the total of carrying costs and order costs;
 - (iv) minimizes the total of carrying costs and stock out costs.
- (t) A series of quantities where each value is obtained by multiplying the previous value by a constant which is called the common ratio is called:
- (i) geometric progression;
 - (ii) arithmetic progression;
 - (iii) annuity;
 - (iv) compound interest.

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

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SECTION B

Answer FIVE questions ONLY from this Section

2. The following data relates to an item of raw material:

Cost of raw material	K200 per unit
Usage per day	100,000 units
Minimum lead time for ordering an item	200 days
Maximum lead time for ordering an item	300 days
Cost of ordering materials	K1,000 per order
Carrying costs	60% per annum

Assume that each year consists of 48 working weeks of 5 days per week.

Required:

- (a) Calculate the following:
- (i) The re-order level. **2 Marks**
 - (ii) The re-order quantity. **4 Marks**
 - (iii) The minimum stock holding level. **2 Marks**
 - (iv) The maximum stock holding level. **3 Marks**
- (b) State any **three** assumptions behind the basic Economic Order Quantity (EOQ) formula. **3 Marks**
- (c) Comment briefly on **two** possible problems that one may meet in determining the economic order quantity. **2 Marks**

(TOTAL : 16 MARKS)

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3. K Ltd supplies tiles to the building industry. The standard cost of one tile for October 2013 was as follows:

	K
Direct materials 5 kg at K20 per kg	100
Direct labour 4 hours at K30 per hour	120
Overheads (based upon an overhead absorption rate of K20 per labour hour)	<u>80</u>
	<u>300</u>

The standard selling price of one tile was K500 and the budgeted sales were 120,000 tiles. All overheads are fixed in nature.

The actual results were:

130,000 tiles were made and sold for a total of K58,500,000. Direct materials used were 660,000 kg at a total cost of K12,540,000. Direct labour was 533,000 hours at a cost of K16,256,500. Actual fixed overheads were K10,000,000.

Required:

- (a) Calculate the following variances:

- | | |
|---|----------------|
| (i) Material price variance. | 2 Marks |
| (ii) Material usage variance. | 2 Marks |
| (iii) Labour rate variance. | 2 Marks |
| (iv) Labour efficiency variance. | 2 Marks |
| (v) Fixed overhead expenditure variance. | 2 Marks |
| (vi) Fixed overhead capacity variance. | 2 Marks |
| (vii) Fixed overhead efficiency variance. | 2 Marks |

- (b) State the relationship between **standards** and **budgets**. **2 Marks**
(TOTAL: 16 MARKS)

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4. (a) Zee Ltd manufactures and sells a special slimming drink which it sells for K200 per can. Current output is 4,000,000 cans per month and this represents 80% of the production capacity.

Zee Ltd has the opportunity to utilize its surplus production capacity by selling its product at K130 per can to a supermarket chain which will sell it as an 'own label' product.

Total costs for the month of September were K560,000,000 of which K160,000,000 were fixed. Assume that fixed costs will not change on acceptance of the order.

Required:

- (i) Based on the above data, should Zee Ltd accept the order from the supermarket? **7 Marks**

- (ii) What **four** other factors should be considered before making the decision? **4 Marks**

- (b) State any **five** features of batch processing. **5 Marks**
(TOTAL: 16 MARKS)

5. (a) XYZ Limited is considering the purchase of a new piece of equipment which would cost K200,000,000.

4,000,000 items are expected to be manufactured in each of the 5 years of the equipment's life. The expected revenue from each item is K40, and expected operating costs are K20. General fixed overheads will be assigned to the equipment each year as follows:

Depreciation - K40,000,000
General fixed overheads - K80,000,000 based on 100% of operating costs.

The cost of capital is expected to remain constant at 20% per annum. Assume that cash flows occur evenly throughout the year.

Required:

- (i) Calculate the payback period for the equipment. **3 Marks**
(ii) Calculate the net present value (NPV) for the equipment. **5 Marks**

- (b) Explain the key features of all discounted cash flow (DCF) methods of investment appraisal. **5 Marks**

- (c) State **three** main factors that are considered in the decision to invest, assuming that finance is available. **3 Marks**

(TOTAL : 16 MARKS)

6. Medi Ltd manufactures a chemical using two processes, mixing and distillation. The following details relate to the distillation process for the month of August.

Input from mixing 360,000 kg at a cost of	K8,300,000
Labour	K3,800,000
Overheads	K2,040,000

There was no opening work-in-progress at the beginning of August. However, closing work-in-progress at the end of August was 80,000kg, which was 100% complete for materials and 50% complete for labour and overheads.

The normal loss in distillation is 10% of fully complete production. Actual loss in August was 36,000kg, fully complete, which were scrapped.

Required:

- (a) Prepare the distillation process account for August, showing clearly weights and values. **10 Marks**
- (b) Distinguish between **normal** process losses and **abnormal** process losses, and how **each** of these losses are dealt with in the costing system. **6 Marks**
(TOTAL: 16 MARKS)
7. (a) State any **four** arguments for the use of marginal costing in routine cost accounting. **4 Marks**
- (b) State any **four** limitations of break-even and profit charts. **4 Marks**
- (c) State **four** advantages of labour incentive schemes. **4 Marks**
- (d) Distinguish between a **transaction** file and **master** file in a computer environment, and give an example of each. **4 Marks**
(TOTAL : 16 MARKS)

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