

Examination No. _____

THE PUBLIC ACCOUNTANTS EXAMINATION
COUNCIL OF MALAWI

2009 EXAMINATIONS

FOUNDATION STAGE

PAPER 3 : MANAGEMENT INFORMATION

WEDNESDAY 9 DECEMBER 2009

TIME ALLOWED : 3 HOURS
9.00 AM - 12.00 NOON

INSTRUCTIONS: -

1. You are allowed **15 minutes** reading time **before the examinations 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 room.
8. **DO NOT OPEN THIS PAPER UNTIL YOU ARE INSTRUCTED BY THE INVIGILATOR**

This paper contains 10 pages

SECTION A

This question is a compulsory multiple choice question.

Answer ALL parts of this question

1. (a) A sample which is collected in such a way that every item in the population has an equal chance of being included is called:
- (i) Stratified sampling;
 - (ii) Random sampling;
 - (iii) Multistage sampling;
 - (iv) Quota sampling.
- (b) A file that contains records that relate to individual transactions that occur from day to day is called:
- (i) Reference file;
 - (ii) Temporary file;
 - (iii) Master file;
 - (iv) Transaction file.
- (c) The value of the middle member of a distribution is called:
- (i) Median;
 - (ii) Mode;
 - (iii) Mean;
 - (iv) Standard deviation.
- (d) A method of product costing where fixed manufacturing overheads are included as part of the cost of inventory is called:
- (i) Marginal costing;
 - (ii) Process costing;
 - (iii) Absorption costing;
 - (iv) Cost accounting.
- (e) Additional stock which is held as an insurance against above average demand during the lead time is called:
- (i) Free stock;
 - (ii) Economic Order Quantity;
 - (iii) Re-order level;
 - (iv) Buffer stock.

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- (f) A program which translates programs written in assembly language into machine code is called:
- (i) Compiler;
 - (ii) Interpreter;
 - (iii) Assembler;
 - (iv) Acoustic coupler.
- (g) Relevant information for decision making:
- (i) Is incremental to the decision in hand;
 - (ii) Can include sunk costs;
 - (iii) Usually includes historical costs;
 - (iv) Includes all of the above.
- (h) The point of maximum frequency density is called:
- (i) Median;
 - (ii) Mode;
 - (iii) Correlation;
 - (iv) Mean deviation.
- (i) The processing of each transaction as it occurs is called:
- (i) Transaction processing;
 - (ii) Online processing;
 - (iii) Batch processing;
 - (iv) Validation.
- (j) A graph of a frequency distribution is called:
- (i) Ogive;
 - (ii) Polygon;
 - (iii) Bar chart;
 - (iv) Histogram.
- (k) 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.

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- (l) Apportioning joint costs over joint products on either the physical unit or sales value basis is useful for:
- (i) Stock valuation;
 - (ii) Decision making;
 - (iii) Stock valuation and decision making;
 - (iv) No purposes as the methods are conventions only.
- (m) The margin of safety is:
- (i) Sales minus variable costs;
 - (ii) The difference between budgeted sales and the breakeven sales;
 - (iii) The difference between zero sales and breakeven sales;
 - (iv) The difference between actual sales and budgeted sales.
- (n) Direct costs are costs that:
- (i) Are incurred directly the factory is open;
 - (ii) Are directly charged to a department;
 - (iii) Are directly under the control of a manager;
 - (iv) Can be directly identified with a product or service.
- (o) Check digit variation is:
- (i) The encoding of invoices with internal codes;
 - (ii) A method of making code numbers self checking;
 - (iii) To enable codes to be self-indexing;
 - (iv) The process of checking invoices for correct calculations.
- (p) Direct wages should always be classified:
- (i) As variable costs;
 - (ii) As fixed costs;
 - (iii) According to their actual behaviour;
 - (iv) As semi-fixed costs.
- (q) A cost driver is:
- (i) Equivalent to a cost centre;
 - (ii) A long term variable cost;
 - (iii) The amount of overhead caused by an activity;
 - (iv) A unit of activity which causes costs.

Continued/.....

- (r) The organisation of records in no particular order or sequence on the computer file is called:
- (i) Random file organisation;
 - (ii) Serial file organisation;
 - (iii) Sequential file organisation;
 - (iv) Index sequential file organisation.
- (s) Access to storage such that each item of data is read or received in a constant time irrespective of the location in store of the previous item accessed is called:
- (i) Direct access;
 - (ii) Serial access;
 - (iii) Sequential access;
 - (iv) Random access.
- (t) In periods of rising prices (inflation), product costs are understated and profits overstated. This is true of:
- (i) Average pricing method;
 - (ii) Standard costing;
 - (iii) First in First Out (FIFO);
 - (iv) Last in First Out (LIFO).

(TOTAL : 20 MARKS)

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

2. (a) Zee Ltd buys an economy size powdered milk to market under its own brand name. The monthly sales in all its stores, assuming 25 workings days in a month are 5,000 units. The sales occur evenly throughout the month.

The company currently orders in lots of 5,000 at a time at a price of K29.50 per unit with a lead time of 15 days. A base inventory of 2,000 units is kept as a buffer stock. You should assume 30 calendar days per month.

Required:

Calculate the re-order point.

4 Marks

- (b) A company needs to hold a stock of item *Y* for sale to customers. Although the item is relatively small value per unit, the customers' quality control requirements and the need to obtain competitive supply tenders at frequent intervals result in high procurement costs.

Basic data about item *Y* are as follows:

Annual sales demand over 52 weeks	=	409,500 units
Cost of placing and processing a purchase order (procurement costs)	=	K484.60
Cost of holding one unit for one year	=	K40.00
Normal delay between placing purchase order and receiving goods	=	3 weeks

Required:

Calculate:

- (i) The Economic Order Quantity for item *Y*, using the formula

$$EOQ = \sqrt{\frac{2C_s D}{C_h}}$$

3 Marks

- (ii) The frequency at which purchase orders would be placed.

1 Mark**Continued/.....**

(iii) The total annual procurement costs and the total annual holding costs when the EOQ is used. **6 Marks**

(c) What are the appropriate costs to be considered in establishing an appropriate safety stock level? **2 Marks**

(TOTAL : 16 MARKS)

3. (a) Aim Ltd manufactures and markets a slimming drink which it sells for K200 per can. Current output is 40,000 cans per month which represents 80% of capacity. Aim Ltd has the opportunity to utilize its surplus 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 2009 were K5,600,000 of which K1,600,000 were fixed. This represented a total cost of K140 per can:

Required:

- (i) Based on the above data, should Aim Ltd accept the offer made by the supermarket **6 Marks**
- (ii) What other factors should Aim Ltd consider before making the final decision? **4 Marks**
- (b) State **three** assumptions behind the cost-volume-profit analysis. **3 Marks**
- (c) State **three** limitations of break-even and profit charts. **3 Marks**

(TOTAL : 16 MARKS)

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4. You have been asked to examine the performance of a subsidiary company for September 2009. The subsidiary supplies tiles to the building industry. The standard cost of one unit for September 2009 was as follows:

	K
Direct materials 5 kilos at K40 per kilogramme	200
Direct labour 4 hours at K60 per hour	240
Overheads (based upon an overhead absorption rate of K40 per labour hour)	<u>160</u>
	<u>600</u>

The standard selling price of one tile was K1,000 and the budgeted sales were 12,000 tiles. All overheads are fixed in nature.

The actual results were:

- (1) 13,000 tiles were made and sold for a total of K13,000,000
- (2) Direct materials used were 66,000 kilo grammes at a total cost of K2,508,000
- (3) Direct labour was 53,300 hours at a cost of K3,251,300
- (4) Actual fixed overheads were K2,200,000

Required:

- (a) Calculate the following variances:
 - (i) Material price variance;
 - (ii) Material usage variance;
 - (iii) Labour rate variance;
 - (iv) Labour efficiency variance;
 - (v) Fixed overhead expenditure variance;
 - (vi) Fixed overhead capacity variance;
 - (vii) Fixed overhead efficiency variance.

7 Marks

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(b) Prepare a variance report for management for September 2009 reconciling the standard profit expected at actual production with actual profit, clearly showing the total variance for each element of cost. **5 Marks**

(c) State **four** disadvantages of standard costing. **4 Marks**
(TOTAL: 16 MARKS)

5. (a) Royale Chemicals Ltd manufactures a range of products in a variety of processes and the data given below relate to Process 3 for the month of October 2009.

	Units	K
Transfer from Process 2	10,800	7,980
Transfer to Process 4	9,650	
Direct materials added during the process		2,019
Direct wages incurred in process		2,889
Production overhead apportioned to process		6,482

There is a normal loss in process of 10% of throughput.
All units scrapped can be sold at K0.20 each.

Opening work in progress:	1,200 units	
Degree of completion:	Materials added in process	40%
	Direct wages	60%
	Production overhead	70%
Closing work in progress:	1,000 units	
Degree of completion:	Materials added in process	80%
	Direct wages	60%
	Production overhead	40%
Units scrapped:	1,350 units	
Degree of completion:	Materials added in process	50%
	Direct wages	40%
	Production overhead	20%

Required:

Prepare a statement showing the cost per unit and the value of the output.

13 Marks

(b) What are normal process losses and how are they dealt with in the costing system?

3 Marks

(TOTAL: 16 MARKS)

Continued/.....

6. (a) The management of a bakery is considering the purchase of a new piece of equipment which would cost K20,000,000. The bakery expects to bake 400,000 loaves of bread in each of the 5 years of the equipment's life. The estimated scrap value of the equipment at the end of its useful life is nil.

The expected revenue from each loaf of bread is K40, and the expected operating costs are K20. The company's cost of capital is 20% per annum.

General fixed overheads will be assigned to the equipment each year as follows:

- Depreciation – K400,000
- General fixed overheads – K800,000, based on 100% of operating costs.

The company is currently using the equipment which was bought five years ago at a cost of K1,000,000.

Required:

- (i) Calculate the payback period for the new equipment. **3 Marks**
- (ii) Calculate the net present value (NPV) for the new equipment. **3 Marks**
- (iii) Interpret the results of your answers given in (i) and (ii) above. **4 Marks**
- (b) State **three** merits of using cash flows in investment appraisal techniques. **3 Marks**
- (c) State **three** assumptions underlying the basic Discount Cash Flow appraisal. **3 Marks**

(TOTAL : 16 MARKS)

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7. (a) A manufacturing company has prepared the following budgeted information for 2008:

	K
Direct materials	800,000
Direct labour	200,000
Direct expenses	40,000
Production overheads	600,000
Administration overheads	328,000

Budgeted activity levels include:

Budgeted production	600,000 units
Machine hours	50,000
Labour hours	40,000

The company has recently spent heavily on advanced technological machinery and has reduced its workforce. As a consequence, it is thinking of changing its basis for overhead absorption from a percentage of direct labour costs to either a machine hour or labour hour basis. The administration overhead is to be absorbed as a percentage of the factory cost.

Required:

- (i) Prepare pre-determined overhead absorption rates for production overhead based on the three different bases for absorption mentioned above.

3 Marks

- (ii) The company has been asked to price job AX. This job requires the following:

	K
Direct materials	3,788
Direct labour	1,100
Direct expenses	422
Machine hours	120
Labour hours	220

Required:

Compute the price for this job using the machine hour absorption rate given that the company profit margin is equal to 10% of the price.

4 Marks

- (b) State **four** arguments for the use of total absorption in routine costing. **4 Marks**
- (c) Define Activity Based Costing (ABC) and state **four** merits for using ABC in product costing. **5 Marks**

(TOTAL: 16 MARKS)

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