

EXAMINATION No. \_\_\_\_\_

**THE PUBLIC ACCOUNTANTS EXAMINATION**  
**COUNCIL OF MALAWI**

**2011 EXAMINATIONS**

**CERTIFICATE IN FINANCIAL ACCOUNTING**  
**PROGRAMME**

**PAPER FA 2: PRACTICAL MATHEMATICS & COMPUTING**

THURSDAY 2 JUNE 2011

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 are **not** 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. Answer **ALL** questions in **Section A** and any **THREE** questions in Section B.
4. Marks for each question are indicated.
5. Financial tables are provided.
6. Use of programmable calculators is **NOT** allowed.
7. All workings must be clearly shown.
8. Begin **each** answer on a fresh page.
9. This question paper must **NOT** be removed from the examination hall.
10. **DO NOT OPEN THIS PAPER UNTIL YOU ARE INSTRUCTED BY THE INVIGILATOR.**

This question paper contains 4 pages

**SECTION A****Answer ALL questions in this section**

1. (a) Write in words the following figure 2,001,001. **1 Mark**

(b) Simplify:

$$2-4(4-2(2-4(4-2)))$$

**5 Marks**

(c) What is the present value of getting K200,000 in 90 days at 12% p.a., assuming there are 360 days in a year. Give your answer to the nearest thousand Kwacha.

**5 Marks**

**(TOTAL : 11 MARKS)**

2. (a) The profits of a food retailing company are shared among its three partners Mr Kaka, Mr Pata and Mr Konda in the ratio 1:2:4 respectively. Mr Pata's share of the profits is K160,000.

**Required:**

Calculate:

(i) The share of the profits received by Mr Kaka. **2 Marks**

(ii) The difference between the share of the profits received by Mr Kaka and that received by Mr Konda. **4 Marks**

(iii) The ratio of Mr Kaka's share of the profits in terms of Mr Konda's share of the profits, expressing your answer in the form 1 : 2. **4 Marks**

(b) (i) Explain the **two** major sections of an e-mail message. **4 Marks**

(ii) Mention any **three** advantages of using e-mail over postal mail. **3 Marks**

**(TOTAL : 17 MARKS)**

**Continued/.....**

3. (a) A truck driver took 4 hours 15 minutes to deliver goods from Blantyre to Mangochi which is a distance of 261 kilometers (km).
- Required:**
- (i) Calculate the driver's average speed in km per hour. **2 Marks**
- (ii) If 1km is approximately equal to 0.62 miles, calculate the average speed in miles per hour. **2 Marks**
- (b) Define the following terms:
- (i) Mean **2 Marks**
- (ii) Median **2 Marks**
- (iii) Mode **2 Marks**
- (c) State any **two** differences between a laser printer and a dot matrix printer. **2 Marks**
- (TOTAL : 12 MARKS)**

### SECTION B

#### Answer THREE Questions ONLY from this section

4. The waiting time for a random sample of clients at an employment advice centre was recorded. The following table gives the frequency distribution of waiting times in minutes:

| Waiting time(x)    | Frequency(f) |
|--------------------|--------------|
| 10 to less than 16 | 6            |
| 16 to less than 22 | 10           |
| 22 to less than 28 | 14           |
| 28 to less than 34 | 12           |
| 34 to less than 40 | 7            |
| 40 to less than 46 | 1            |

**Required:**

- (a) Find:
- (i) the mean **1 Mark**
- (ii) the standard deviation for these times **15 Marks**
- (b) Give a brief interpretation of  $\Sigma f$  and  $\Sigma fx$  from your calculations in terms of clients and waiting times. **4 Marks**

**(TOTAL : 20 MARKS)**

**Continued/.....**

5. (a) A utility bill is calculated using the formula  $C = F + nx$ .
- (i) Rearrange the formula to find  $x$ . **2 Marks**
- (ii) Find  $x$  when  $c = 100$ ,  $F = 15$  and  $n = 1000$ . Give the answer to 2 decimal places. **3 Marks**

- (b) A farmer wants to put a wire fence around his right-angled triangle vegetable garden whose two shortest sides measure 12 meters and 8 meters respectively. The wire fence costs K1,250.60 per meter, labour costs K4,500 and poles cost K328 each. The poles will be 1.5 metres apart.

**Required:**

Calculate:

- (i) The perimeter of the garden. **6 Marks**
- (ii) The cost of fencing the garden. **9 Marks**

**(TOTAL : 20 MARKS)**

6. (a) Mr Phiri invested K108,000. At the end of each year he was withdrawing the interest. After 4 years he had withdrawn a total of K32,400 in interest.

**Required:**

Calculate the annual rate of interest for the invested money. **5 Marks**

- (b) Mrs Banda bought a secondhand motor bike for K79,520. This motorbike depreciates at 11% per annum.

**Required:**

Calculate the value of the motor bike after using it for 2 years. Give your answer to the nearest Kwacha. **5 Marks**

- (c) Given that tax rates for employees are as follows:

| Monthly income | Tax rate |
|----------------|----------|
| 0 – 15000      | 10%      |
| 15001 – 28000  | 22%      |
| 2801 and above | 40%      |

**Required:**

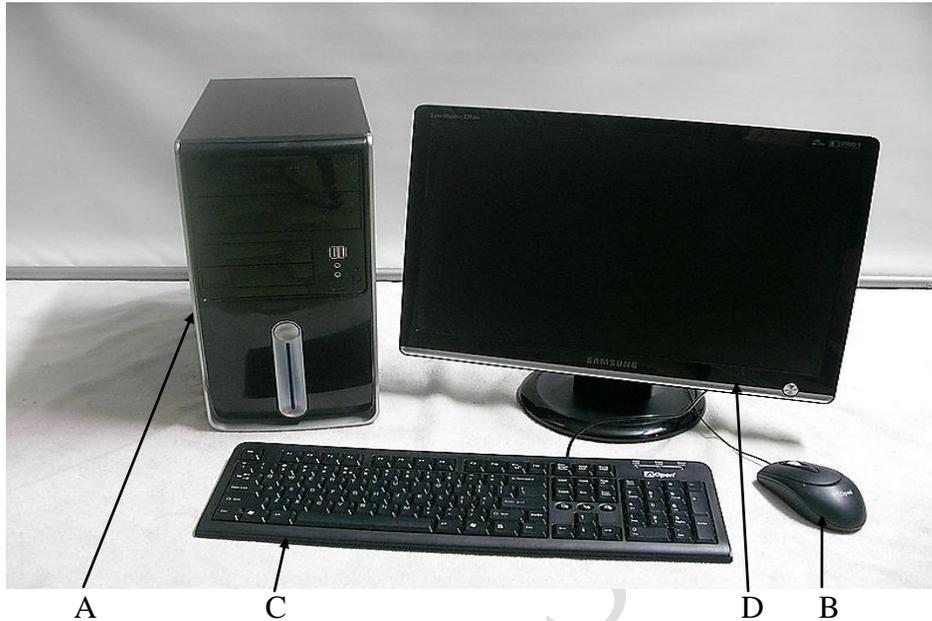
Calculate the tax paid by Miss Gwaza for one year if her salary is K35,000 per month. **10 Marks**

**(TOTAL : 20 MARKS)**

**Continued/.....**

7. (a) State any **four** functions of an operating system. **8 Marks**

(b)



(i) Name the parts of the computer labeled A to D. **4 Marks**

(ii) What is the general name of this type of the computer? **2 Marks**

(iii) State any **three** disadvantages of part (D). **6 Marks**

**(TOTAL : 20 MARKS)**

**END**