

THE INSTITUTE OF CHARTERED ACCOUNTANTS IN MALAWI

DECEMBER 2015 EXAMINATIONS

CERTIFICATE IN FINANCIAL ACCOUNTING

PAPER FA2: PRACTICAL MATHEMATICS AND COMPUTING

EXAMINERS REPORT

INTRODUCTION

The paper was comparable to the past papers of Practical Maths and Computing. The paper covered all major sections of the syllabus. The paper conformed to the distribution of questions and marks in line with the requirement of the syllabus.

GENERAL PERFORMANCE

Overall performance was average. Most candidates scored high on questions that required calculations but performed poorly on descriptive questions. The candidates failed to express themselves in English. From the responses offered, most candidates lacked the basic knowledge in computing an indication that they concentrate more on Mathematics part of the syllabus ignoring the computing part which is equally important.

COMMENTS ON INDIVIDUAL QUESTIONS.

QUESTION 1

Part (a) of this question was on basic arithmetic approximation. The candidates were asked to round the numbers to the stated level. Most candidates managed to round 23345 to the nearest 1000. Though some, were writing $23345 = 23$ instead of 23000. The number 3.245 to one decimal place was written as 3.20 instead of 3.2 most candidates failed to round 23 months to the highest 10 months. They ignored the highest 10 months, they just rounded to the nearest 10 giving the answer as 20 instead of 30.

Part (b) of the question required candidates to convert numbers in base 10 to binary and base 16 to base 10. Most candidates were able to repeatedly divide the base 10 number by 2 and taking the remaining from the bottom. However, some candidates had problems in converting 8B to base 10, while realising that B means 11 they wrote 811 then converted this number(811) to base 10 thus instead of $8 \times 16^1 + 11 \times 16^0$ they wrote $8 \times 16^2 + 1 \times 16^1 + 1 \times 16^0$

In Part (c), the question was on set theory. Candidates were required to state 'True' or 'False' on whether one set or subset was a subset of another or not, whether sets were equal or not and complements of sets. Some candidates showed lack of understanding of complement of sets.

QUESTION 2

The question in part (a) required candidates to state statistical measures e.g most occurring value lying at the midpoint of an ordered distribution and the difference between the highest and lowest values of ordered distribution. Most candidates understood the question, however, others were describing how to get mode, median and range instead of just mentioning.

In part (b) candidates were required to state why graphs are important in the presentation of information. Some candidates lost marks because they could not construct proper sentences e.g. they allow big things to be drawn on paper, drawing a bus on paper as reasons for presenting information through graphs. This showed that these candidates did not understand the question.

In part (c) candidates were tested on their knowledge of probability. Candidates were required to apply the additional law of mutually exclusive events. Instead of just adding the probabilities of type A and Type C. i.e. $\frac{3}{12} + \frac{7}{12}$ to give $\frac{10}{12}$, some candidates were adding both the numerators and denominators hence $\frac{3}{12} + \frac{7}{12} = \frac{10}{24}$ instead of $\frac{10}{12}$. Yet others applied the multiplication law i.e. $\frac{3}{12} * \frac{7}{12}$.

In part (d) candidates were asked to state characteristics of ROM. Most candidates performed very well although some candidates had problems expressing themselves in English.

QUESTION 3

Part (a) required candidates to divide 21 in the ratio 2:5. Most candidates managed to get it right.

Part (b) required candidates to state the functions of the following word processing features.

- i. File management
- ii. Spell checker
- iii. Thesaurus.

The candidates indicated lack of knowledge on file management and Thesaurus. The candidates were just guessing e.g. file management is used to 'manage files' were common answers instead of stating that file management allows the user to create, delete, move, search etc for files. Thesaurus is a book containing a classified list of synonyms: synonym finder. Candidates could have stated that thesaurus allows the user to check for synonyms.

QUESTION 4

Part (a) the question required candidates to compare two methods of commission a straight commission of 3.5% and fixed commission of K25,000 per week plus a commission of 1.5% of the selling price, which was K2 million. Most candidates responded very well to the straight commission. However, most candidates failed to calculate the second commission as they were

adding the K25,000 to the selling price before calculating 1.5% commission instead of just calculating 1.5% of K2million then add to the fixed K25,000.

In part (b) candidates were required to explain basic classification of printers and to differentiate impact printers from non impact printers. Most candidates did not know that basic classes of printers are page, live and character printers

Many candidates indicated lack of knowledge on this part though their answers were the opposite of what is there e.g. non impact printers are noisy and others were thinking about the impact of printers on business. The correct answer should have been that 'impact printers' have print heads which hit the inked ribbon against paper and they are noisy e.g. dot matrix, daisy wheel printer drum, while non impact printers have no direct contact between the print head and the paper being printed. They print using light or thermal to produce image on paper or sprays ionized ink on paper e.g. laser printer, inkjet printer etc.

QUESTION 5

Part (a) required candidates to give advantages of off-the shelf packages compared to designing a system from scratch ((bespoke). Many candidates responded very well though some responses were vague e.g. they are reliable without elaborating. Some candidates had problems expressing themselves.

Part (b) required candidates to give meaning of server computer, network computer and mainframe computer. Many candidates did not know the meaning of these.

Server computers are client-server type of relationship in which case even a powerful computer can be used in this role.

Network computer is not the same as computer network as expressed by some candidates. Network computers are a series of computers linked in a network. Mainframe computer is very powerful computer to which hundreds of or thousands of terminals can be linked.

Part (c) was based on electricity bill. The bill comprised of K5000 fixed charge followed by K45 per unit for the first 5000 units and K38 per unit for units in excess of 5000. Given the two meter readings most candidates correctly calculated the units used. Some candidates did not add the fixed charge to the cost of the used units thereby failed to get the correct bill to be paid.

QUESTION 6

In part (a) candidates were required to define population, variable, sample, statistical inference, frequency and table as used in statistics. Most candidates defined population as used in everyday i.e. number of people living in an area. Majority did not know statistical inference as something to do with estimates, predictions they confused the term. Table was another problem. Candidates

said it is a figure where numbers are entered without mentioning the rows and columns. There was clear indication that candidates use terms without knowing their meanings.

Part (b) required candidates to calculate mean, range and standard deviation. Many candidates used column of days as x and the outcome as frequency, this distorted the answer they found in $\sum fx$ as 8099 instead of 1422 and $\sum f$ as 1422 instead of 10 and range $10-1=9$ instead of $167-120=47$. As a result of this confusion the final answers were wrong.

QUESTION 7

In part (a) factorisation of $6x^2 + 5x - 4$ was well done, although some candidates were solving for x which was not part of the question.

Part (b) required candidates to state how some money was to be invested to get the best reward. There were two ways of calculating compound interest on K100,000 invested over a period of 5 years was to be compared. One option was to offer 4.5% per annum and the other had different rates in each year starting with 3.5%, 4%, 4.5%, 5% then 5.5%. Most candidates had no problem with the first option. Some candidates added all the rates for the second option to get 22.5%. Others used the last rate of 5.5% for the five years. Yet others used simple interest where the interest was not reinvested together with the principle.

In part (c) candidates were required to explain the following validation checks, limits check, completeness, format and existence. Candidates explained these checks based on the literal meaning of the word not as used in the validation programme.

CONCLUSION

The paper gave chance to candidates to express what they could recall, comprehend and apply what was learnt in a variety of areas.

However, there was clear indication that some candidates lacked seriousness in responding to the questions. Some were not prepared for the exam. The computing part was poorly performed followed by descriptive responses. Some did not understand the instructions as they wrote more than one question on the same page and others wrote all three questions in section B instead of two questions.

RECOMMENDATIONS

- Candidates must prepare well for both aspect of the paper discursive and calculation questions.
- Candidates must follow all instructions for the paper as well as for individual question.

- Candidates must understand the meaning of the language used in computing.
- Candidates must be able to apply the concepts learnt in relation to work environment.
- Candidates must concentrate in all areas of the syllabus.