

## MARKETING INFORMATION

ANALYSIS I (MIA I)

## General Comments

1. The results this Autumn are as follows:

| Grade A | $13 \%$ |
| :--- | :--- |
| Grade B | - |
| Grade C | - |
| Grade D | $20 \%$ |
| Grade E | $40 \%$ |
| Grade F | $27 \%$ |

The overall pass rate (33\%) is very low, but as it is based on just 15 candidates, it is subject to substantial variation depending on the performance of every single individual. Note that each additional person passing would add more than $6 \%$ to the pass rate- so a comparisons with last May is misleading.
2. Many candidates attempted only 4 questions, rather than the 5 required in the exam and so, from the very outset, their chances of passing were reduced. This was a particularly noticeable problem, as almost everyone passed at least two of the 5 questions.
3. As those who monitor the exam papers in this subject will know, there are very limited opportunities for any examiner to set unreasonable questions and it is a very standardised and predictable paper. As an exercise in competence rather than a test of real mathematical ability, this exam didn't contain any new question types. All questions asked in this session have appeared in one form or another within the past few years. So the poor results cannot be attributed to an especially hard paper.

4 If candidates give good answers, they will get the marks. This time I am delighted to say that one paper was sufficiently good to get $100 \%$. Many congratulations to the candidate concerned.
5. So, as usual, may I encourage candidates to practise on past papers and ensure that they can do at least 5 sections of the syllabus?

## Question 1

This section of the syllabus deals with the calculation of confidence intervals and matters of sample size - both of which are very important for the conduct and interpretation of survey research. It was attempted by about half of the cohort and most passed. One candidate got full marks. The formula for calculating sample size is particularly easy to use and students should be encouraged to practise using the two basic formulae (one for use with means and standard deviations and the other when one is using proportions/percentages). In this case candidates should note that a $99 \%$ confidence was requested. Part 2 of this was also the calculation of a sample size. Where no estimate of $\mathbf{p}$ is mentioned, we use the value $\mathrm{p}=0.5$ or $\mathrm{p}=50 \%$ (depending on the way you use the formula).

## Question 2

This deals with the making of tables/ charts and diagrams and the summary descriptive statistics such as measures of central tendency (mean, mode and median) and measures of dispersion (usually the standard deviation). It was attempted by virtually every one and most people got a good pass mark. Marks were lost by the failure to label the axes of their histogram and to give it a heading. The calculation of the median was generally pretty poor and while many calculated the mean correctly, the attempts to calculate the standard deviation were less successful.

## Question 3

This section on Indices was not very popular even though it was fairly simple. While some people find the changing of base year to be tricky, the Paasche Index should not have presented any problem.

## Question 4

The question on times series is always very popular section but on this occasion the marks were rather low. This was due to the inability of people to find the trend and make forecasts using annual data. Many of the weaker answers followed the methods appropriate for quarterly data even including seasonal variation!!

## Question 5

This section dealing with correlation / regression was quite popular also and generated fairly good results.. A few candidates neglected to make a prediction based on the regression line they had calculated. The plotting of a scatter diagram to illustrate particular kinds of regression should be a "banker" but surprisingly the results from this section were disappointing. Finally, the meaning of the term "multiple regression" was only attempted by a few.

## Question 6

No one attempted these probability questions.

## Question 7

No real attempt was made to deal with the tests of hypothesis.

## Question 8

This question of designing research on charities was quite popular, with detailed decisions being taken and generally good practical research being proposed.

