



## EXAMINER'S REPORT

AUGUST 2007

### MARKETING INFORMATION ANALYSIS I (MIA I)

#### General Comments

1. As always, the challenge in this paper is to demonstrate competence in analysis of marketing data. The tasks are to understand and process various kinds of business information and marketing research data. These tasks are routinely examined and the format of the paper does not change from year to year (i.e. eight areas of the course are examined every session over eight questions). So this paper bears a strong resemblance to those set in previous years. This year's results are pretty much on a par with those of the recent past.
2. I must acknowledge that the remarks I make here are really no different from those made since such reports were instituted many years back. However, as students each year approach the subject for the first time, these comments are new for each group.
3. Remember that marks are available in this paper irrespective of one's mathematical talent. Given a variety of tasks in the paper, one should carefully work on one's strengths. Some questions suit candidates who are good at essay writing. These are areas relating to sample types, the design of research, research report writing or the meaning and use of particular techniques. All students should also be adept at calculations for confidence intervals, the mean and standard deviation, correlation, regression, time series and index numbers. This is all fairly routine stuff and should be mastered. Remember that practice makes perfect and that a study of past papers is absolutely essential. If you didn't pass last year's papers, don't expect to pass this year.

#### Question 1

The focus is on giving a detailed explanation on how to choose a systematic sample of size of 350 students from a population of 14,000. This wasn't really popular and the answers were also varied - ranging from full marks to zero. The 'skip interval' should be calculated and the method of selecting the first student should be selected. The second part of the question is also quite familiar. Here the candidate was required to calculate a sample size given the size of the confidence interval for a population percentage. This is very standard. However the population size has no impact in this question. It is just irrelevant extra detail – designed to force the candidate to select only the important pieces of information. It is your task to be selective!!

#### Question 2

The first part of the question asked for a histogram for the total population which required male and female number to be added. The mean age of the population was also asked as was the standard deviation. This is pretty standard stuff and should be mastered by all candidates.

**Question 3**

The topic of index numbers was usually popular. Part one required a change of base. This was well done, the level of annual inflation was not great. The relative wages paid to female and male is quite standard and has been asked on many occasions.

**Question 4**

The question on time series is also popular and it tends to be performed pretty well. Students are required to graph the data and to calculate the trend and seasonal variation. Quarterly forecasts were also on the agenda. These are generally dealt with in a competent manner and this topic is by far the best question for many people. Just note that the examiner sometimes uses annual data in this question.

**Question 5**

Correlation and regression are generally well done. Candidates were able to demonstrate a scatter diagram but were less careful regarding the chart labels. The correlation coefficient was asked and then using a regression equation the students were asked to make a forecast.

**Question 6**

Only a tiny number of candidates attempted this question on probability, which was very poor. A Poisson distribution is quite easy as are combinations. The normal curve is also standard. By making a table for section d, it is easy to see the answer.

**Question 7**

This question on a Chi-square test was asked previously and might offer a good choice for the students. Secondly a hypothesis test for the difference of two population proportion using data from two large samples.

**Question 8**

Again, the examiner was surprised that few candidates attempted this essay-type question. Good marks can be gained when one works through the planning of a research programme to investigate particular behaviours and attitudes. Decisions should be made regarding all the steps necessary for such an exercise. In this case the focus was on the behaviour and attitudes of people regarding pensions.