

## MARKETING INFORMATION ANALYSIS I (MIA I)

## General Comments

The overall pass rate around $45 \%$ was not too bad for this time of the year. Added to that is a group of candidates whose performance will be reviewed at the Exam Board as they scored a marginal fail ( $35-39 \%$ ). Surprisingly, some of these failed to complete five questions and so lessened their chances of getting the elusive few marks to bring them over the threshold.

That said, it must be noted that a third of all the candidates scored under 35 marks on what was a basic paper. While one student merited a B ( $60-69 \%$ ), the majority of those who passed scored a mere $40 \%$ - the bare minimum.

Those who are unfortunate enough to have to repeat in August should be advised that it is designed to be similar in standard but not identical. Both papers are set in February and only when the drafting is complete is a decision taken as to which is for the May sitting and which for the August sitting. The August paper is not therefore a 'softer option'.

With the Examiners' reports on the MII website for many years now, students are advised to download all available reports and to take the comments to heart. Frankly, 'new' comments are hard to compose as the same errors recur with each successive cohort of students. For that reason many of the comments on the individual questions are similar to those in previous years.

## Question 1

The answers on the subject of sampling are quite important and should be attempted by all marketing students. However they are neither popular nor well done. Only a few candidates tried the question and they generally didn't meet with much success. The answer to part (a) is simply to calculate a confidence interval to define the boundaries of an estimate for a population percentage. This is what the level of precision entails. Part (b) merely requires a simple formula to obtain the necessary sample size. Then using a cost of $€ 5$ per interview the costs of interviewing and data processing can be obtained. By adding the fixed costs for the survey to this sum, the total cost for the survey can be obtained.

## Question 2

This question was attempted by virtually everyone and produced the best results. Few know about either Z-charts or Lorenz curves however. Answers were much better for drawing of a histogram and the calculation of the mean and standard deviation. Firstly, all students should get full marks for the construction of a histogram from either raw data or a frequency table. Remember to include all labels and a heading for every chart. Also, in a histogram the frequency is represented by area. So if the base is wider, then the height is reduced proportionately.

Again you will need to be able to calculate both the mean and the standard deviation from a frequency table. This is very basic and should be mastered by all candidates. As I have said many times in the past - 'If you can't do this, you really shouldn't expect to pass'. These topics are fundamental to the course and should be within everyone's competence.

## Question 3

Many attempted this question but most concentrated only on part (a). Here the calculation of an overall index was required. This is a fundamental area of this topic and only requires fitting the numbers into a formula. Remember that the price and quantity must be multiplied for each item of the index. Some people mistakenly multiplied the total of all the prices by the total of all the quantities!! The calculation of a Consumer Price Index is one of the key areas of the course and should be known by all candidates. Its uses and how it is constructed and updated are described in the students section of the Central Statistics Office website. (www.cso.ie).

## Question 4

Usually time-series analysis is the most popular question and usually is well performed. Again this year proved to be no exception to this general trend. This time the data were annual and so those who regarded it as quarterly did very badly. The meaning of 'seasonally adjusted data' was not well understood as the concept relates to the removal of seasonal effects in order to see the overall trend. So unemployment figures in a particular April may be less than those three months earlier. However as a seasonal reduction occurs every year, we need to remove the typical seasonal variation in order to see if that reduction is less or more than usual. The forecast of sales of each quarter of 20072008 and 2009 was generally OK.

## Question 5

The regression of production costs on number of units produced was popular and generally earned high marks. Students were asked to plot a scatter diagram - which also was well done. Remember to label every graph fully. The use of a rank correlation is easy and only takes a short amount of time, so it is an ideal exam question to study.

## Question 6

As usual the probability questions are very unpopular, even though they are very short. The first short question on the normal distribution was fairly dismal. A tree diagram showing the outcome of each of the three inspection points will make this question rather easy. The permutation formula can give the total number of different committees of size three from six candidates. The Poisson distribution is worth studying as it takes such a short time to insert the data into a formula.

## Question 7

Few candidates attempted these questions on hypothesis tests. The section on chi-square was well answered by a few candidates.

## Question 8

A few students did well on this question where they were asked to draft guidelines for a written report. A table of data should accompany part (b) of this question and is included separately. Students who were not issued with this table were not penalised.

