

## **Question 2 (Chapter 3)**

For this assignment you are to choose some aspect of your university's assessment regulations (such as hand-in procedures for assignments, the different types of assessments or the regulations regarding retaking modules, for example). It is important that you should do some research into the relevant issues and then conduct a sample survey, using questionnaires of your own design to find out people's attitudes.

You should attempt to determine from your respondents: -

- Their views on the issues that you are looking at.
- Their views (if any) on how the aspect of the assessment regulations you are looking at could be improved.
- Relevant information about the respondents - you will need to get enough factual information to examine whether opinions and knowledge vary from one group of people to another.

The tasks are:

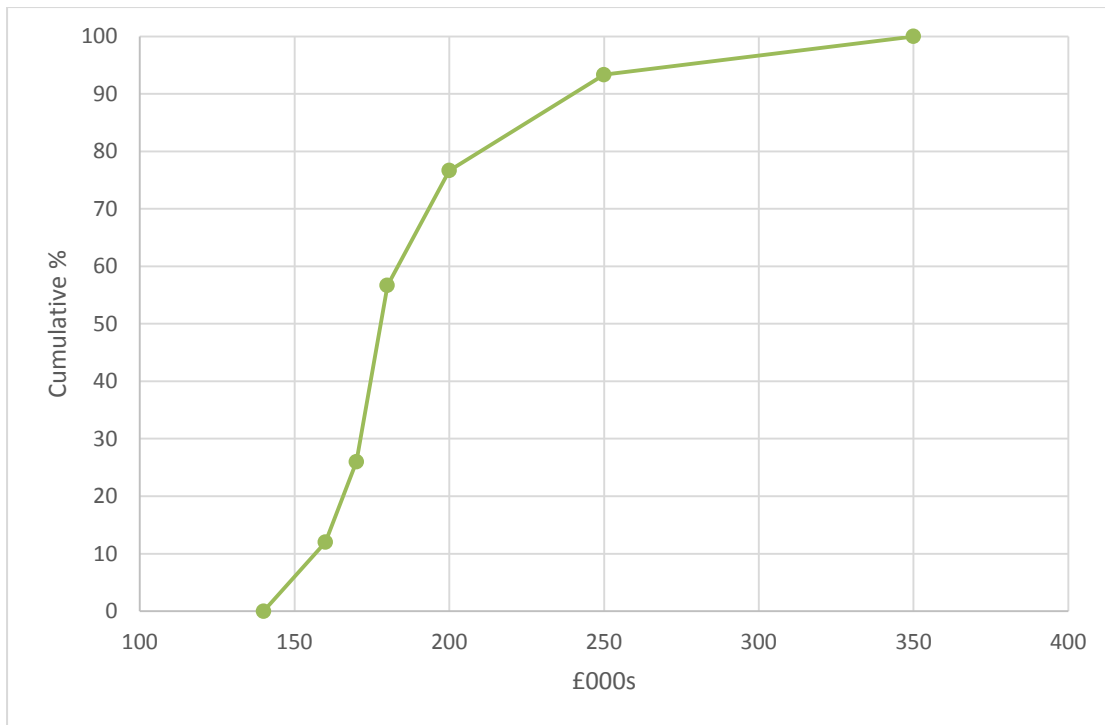
1. You are to design a questionnaire.
2. You are to carry out interviews to obtain a sample according to whatever sampling method seems most appropriate. For the analysis you are likely to need a sample of at least 60.
3. Analyse the results of the survey using Excel or an appropriate statistical package.
4. Write a report giving your findings and conclusions.

### **Question 3 (Chapter 5)**

The prices of a sample of 150 houses, in a northern area of a town, are as follows:

Price band (£000s)	Number of houses
140 to less than 160	18
160 to less than 170	21
170 to less than 180	46
180 to less than 200	30
200 to less than 250	25
250 to less than 350	10

- (a) Estimate the mean and standard deviation of house prices in this area.
- (b) Give two brief reasons why your answer of the mean in (a) is only an estimate of the mean price of houses in the northern area.
- (c) The cumulative frequency (%) ogive for this data is shown below. From this ogive, estimate:
- (i) The median value of the house prices
  - (ii) The inter-quartile range of the house prices
  - (iii) The percentage of houses that are worth more than £225,000



(d) Comment briefly on the difference between the median value calculated in (c) and the mean calculated in (a). What does this tell you about the shape of the distribution of house prices?

A similar survey is conducted on the southern side of the town. The mean is estimated to be £205,000 with a standard deviation of £11,000. Write two brief sentences to describe the main differences between the northern and southern sides.