Chapter 11

Sampling and materiality

11.1 (a) *False*

The use of statistical sampling requires the auditor to make judgements about the level of confidence, estimated error rate or amount and tolerable error rate or amount to use when performing statistical sampling tests. The use of statistical sampling does, however, result in auditors quantifying and making visible their judgements on the items mentioned in the previous sentence.

(b) *False*

Tolerable error is the maximum error the auditor is willing to accept in the population without considering revising the confidence limit or extending audit testing. The level of error the auditor anticipates will be in a population is called the expected error rate or amount.

(c) *True*

The use of monetary unit sampling allows the auditor to extrapolate from their sample results to the population and obtain estimates of the most likely error and maximum error or upper error limit in the population.

(d) *False*

The auditor uses the concept of materiality at the planning stage, the testing stage and at the end of the audit.

(e) *True?*

We have said true, with a question mark, to this because normally the monetary value of an item will be the most important factor influencing its materiality. However, there are other aspects, such as the nature of the item, which also influence materiality. For certain items, such as, directors' remuneration the crucial factor influencing why it is material is because it is a specific statutory requirement that it be accurately disclosed in the financial statements.

(f) *True*

The level of profit a company has earned during a year is an important influence on the materiality level set by auditors. It is important to stress that it is not the only factor. There are a number of other factors which influence the level of materiality, for example, the net assets and turnover of the company and when considering individual account balances their nature.

11.2 (a) Three situations when the auditor would be unlikely to use sampling techniques are:

(i) When the population is very small it is practical for the auditor to examine all the items in the population. It may also be more cost-effective. This is because the time it may take the auditor to design and implement a sampling strategy may outweigh the additional time they spend checking all the items rather than a sample.

(ii) When individual transactions or balances are material they will usually be automatically tested by the auditor as a matter of course and therefore not be subject to audit sampling techniques.

(iii) Where the company's records are held in such a way that it is impossible to identify the population, it may be more convenient and cost-effective for the auditor to use alternative audit procedures to verify the account balance or transactions.

(iv) Where items are specifically identified as high risk, they may all be checked. An example would be the items included in a computer generated exception or error report.

(v) Where auditors have obtained evidence to suggest that some form of fraud may be occurring, they may carry out a complete check of specific types of

transactions or balances where they believe the fraud may be taking place rather than checking a sample of those transactions or balances.

(b) (i) Attribute sampling is commonly applied in compliance testing where the auditor is testing whether a company's control procedures are implemented properly. From the sample selected auditors are concerned with identifying whether for each item in the sample the control has been applied or not. Thus the auditors are essentially concerned with identifying two attributes relating to the control procedures; YES! - the control has been applied, or NO! - the control has not been applied. In applying attribute sampling to internal control procedures the auditor's objective is to determine the likely error/deviation rate and upper error/deviation rate in the population. From these two figures the auditors can decide whether the amount of confidence they have in the control being tested is justified or whether they need to revise their estimate of control risk. Attribute sampling can also be used to estimate likely error in account balances and indeed the statistical foundation of it forms the basis of monetary unit sampling.

(ii) Monetary unit sampling is used to provide the auditor with an estimate of the most likely and upper error limit in monetary terms which may exist in an account balance. The auditor can then compare the upper error limit with the tolerable error and decide on an appropriate course of action. This course of action will depend on whether the upper error limit is less than or in excess of the tolerable error. The auditor may also be influenced by how close the upper error limit is to the tolerable error. In this form of sampling the population is assumed to consist of £1 units and the auditor selects a sample of those £1 units. The auditor does not actually audit the £1 units selected but the balance or transactions associated with the individual £1 units. The auditor then tests the balances or transactions to see if they are correctly stated. For those not correctly stated the auditor calculates for each the level of tainting, defined as 'the percentage of error in the account balance or transaction' and is calculated by dividing the amount of error by the book value of the item. The percentage of tainting found in the individual balances are then summed to give an overall tainting percentage. Using this in conjunction with the average sampling interval and appropriate reliability tables the auditor can then calculate the most likely error and the upper error limit.

(c) The factors auditors consider when determining the size of a sample are:
- The expected error rate or amount in the population. This would depend among other things on the effectiveness of the internal control system, the results from other related audit tests and the auditor's results relating to testing this internal control in the previous year's audit.
- The confidence level used by the auditor. This would depend on the auditors' assessment of inherent and control risk over the internal control or account balance being tested, the degree of assurance the auditor has gained from other audit tests of the same (or related) internal controls or account balances, and the materiality of the account balance or the importance of the internal control being tested
- If the population is stratified this would also influence the sample size. Normally stratification results in a smaller sample sizes.

(d) Although the question does not state what is meant by 'enhance' it is probably safe to presume that it means quality or reliability of the evidence has been improved. In a question of this sort students should attempt to give a balanced answer including, where appropriate, both arguments for and against the proposition that using statistical sampling will enhance the quality of audit evidence. It may be argued that the use of probability theory and the requirement that the auditor specifies their confidence level, expected error level and so on enhances audit

evidence. The use of random selection methods does reduce the possibility of bias in determining the sample and this is likely to increase the reliability of the audit evidence. In addition, it may be argued that quantification of the results of the sample enhances the audit evidence. The use of a systematic and statistically based method is also likely to improve the consistency with which audit sampling is conducted. It must be reiterated, however, that the results of the sample and hence the evidence obtained will be influenced by the auditor's judgement in relation to the aspects mentioned above. Thus, if the auditors' judgement of these aspects is faulty the use of a statistical sampling method will not of itself compensate for the inappropriate judgement. It has been suggested that in non-statistical or judgmental sampling the auditor can use their instinct in determining the size of the sample and sample selection and this can be more effective in identifying errors and misstatements and hence producing reliable evidence than mechanically applying statistical sampling methods. Adherents of statistical sampling would obviously disagree that statistical sampling reduces the scope for using the auditor's instincts. It also needs to be stressed that audit sampling is only one form of audit testing. Depending on the circumstances it may not be the most cost-effective method of obtaining reliable audit evidence.

Finally it should be mentioned that statistical sampling only enables the quantification of sampling risk. Like other audit testing it does not control for non-sampling risk. Thus, if the statistical sampling tests are poorly conducted by audit staff they will not produce reliable audit evidence. It may also be considered that the very fact of quantifying sampling risk may obscure the existence of non-sampling risk. As with other audit tests, non-sampling risk can be reduced by the audit firm instigating good training and review procedures.

11.3 Leslie Ltd has had a steadily increasing trend of profits. If a graph is drawn plotting profit and year, one would find that for 2006 to 2009 the points lie on a upward sloping straight line. If the point for 2010 is plotted then it becomes apparent that the £5,000 adjustment would cause the straight line to bend downwards and this may be indicative that profits will flatten out more in the future. This is a matter that apparently could change your perception about the trend in profits. Even though the £5,000 represents only 2.5% of net profit as stated and therefore you might argue that it is not material to the view given by the draft accounts, the downturn of the straight trend line might make it necessary for the accounts to be adjusted if a true and fair view is to be given.

11.4 The case of Leven Ltd gives a chance to consider the principle that disclosure of circumstances in the notes to the accounts may not be enough to cause the accounts to give a true and fair view. What the directors are proposing needs further appraisal. Are they really suggesting that:

(a) The profit and loss account and balance sheet figures are not true and fair in themselves; but that

(b) If readers take information in the notes to the accounts *and makes the necessary adjustments themselves*, they will have been given all the information necessary to make proper decisions and that, therefore, the accounts taken as a whole will give a true and fair view?

It seems unlikely that a rational person would agree with them. The amount in question (£30,000) is clearly material, at more than 15% of stated income and more than 5% of stated debtors. In these circumstances the auditor would have to explain that an adjustment to the financial statements should be made if a modification of the audit opinion is to be avoided.