Examiner hints and tips:

Pearson LCCI Level 3 Certificate in Business Statistics (VRQ) ASE20100

1. The calculations for a chi squared test are well-understood. A clear understanding of the conclusions from such a test, including sight of the contributions, to fully understand in what way the two factors may be associated is now expected.
2. Candidates are now required to do more than carry out the mechanistic calculations of this test.
3. The connection between a statistical test and a confidence interval was not understood at all. The concepts of statistical testing is crucial to this Level 3 paper. Candidates should be aware of the steps required.
4. Probability is a difficult concept but is important as a measure of risk within a business environment. Candidates need to know when to multiply and add probabilities.
5. Sampling methods and the various methods of data collection can no longer be avoided. It is important that candidates are prepared well for these topics.
6. The concepts of statistical testing involving type 1 error, type 2 error, one- and two-sided tests are likely to be tested within the context of a business oriented question, rather it being tested by their definitions.
7. Although good marks can be obtained from the calculation of the regression equation (if required), further marks can be obtained by understanding what the data is showing – is there a strong relationship, is it positive or negative, are there outliers?
8. A standard mistake when testing for the significance of a correlation coefficient is to use n-1 degrees of freedom rather than n-2 degrees of freedom for the t-distribution.
9. Be careful when computing a measure of skewness that the mean, median and standard deviation are measured in the same units.
10. The way that money is affected by time is a really important aspect of business. It is essential that candidates understand the way that inflation affects the value of money over time.
11. It is important that candidates are prepared well on sampling methods and the various methods of data collection. The best way to get an understanding of data collection is to undertake practical experience.

Summary
Candidates showed an excellent ability to carry out standard procedures involving mechanistic calculations such as obtaining least squares regression equations, correlation coefficients, chi squared test, mean and standard deviation of grouped data, and other statistical tests. However, there was a general weakness in interpreting results and in explaining many statistical concepts, including clear explanations concerning statistical testing.
It would benefit candidates to use real data and develop skills in understanding the results of their calculations.
Candidates appeared to have taken to the new style of paper for this specification reasonably well. In general, they attempted most questions and made reasonable attempts at topics, such as Index Numbers, Collection of Data and Probability that had tended to cause difficulties to candidates on the previous legacy paper.
Unfortunately, many candidates were unable to get to grips with data collection methods and, in particular, the various sampling methods. An understanding of the basic sampling methods (simple random, systematic, stratified, cluster and quota) is essential for this new specification paper.