



Professional Qualification in COMPUTING AND INFORMATION SYSTEMS

Level 4 Diploma

UNIT 4 – INFORMATION PRESENTATION AND ANALYSIS

Question 1

- (a) **State** what is meant by the symbol ' $\sqrt{}$ '. (2 marks)
- (b) **Explain** the difference between the population mean **and** sample mean. (8 marks)
- (c) **Calculate** the mean using the following data set: 1, 1, 1, 4, 4, 5, 5, 7. (10 marks)

Question 2

Compare the implications of using open or closed questions in a survey. (20 marks)

Question 3

- (a) **Explain** what is meant by the term histogram. (4 marks)
- (b) **Describe TWO** situations when it is useful to present data using histogram. (8 marks)
- (c) **Illustrate** the following data using a histogram: 1, 1, 1, 4, 4, 5, 5, 7. Use diagrams and/or examples to support your answer. (8 marks)

Question 4

- (a) **State** what is meant by the term ordinal. (2 marks)
- (b) **Explain** the relevance of the mean average for ordinal data. (8 marks)
- (c) **Calculate** the population variance for the following data set: 1, 1, 1, 4, 4, 5, 5, 7. (10 marks)

Question 5

- (a) **Explain** the meaning of the term 'distribution'. (4 marks)
- (b) **Describe** the normal distribution. (4 marks)
- (c) **Compare** the difference between random sampling and stratified random sampling. (12 marks)