



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 ' Σ '. (2 marks)
- (b) **Explain** the difference between the population standard deviation **and** sample standard deviation. (8 marks)
- (c) **Calculate** the sample standard deviation using the following data set: 2, 2, 3, 3, 4, 4, 7, 7. (10 marks)

Question 2

- (a) **State** what is meant by the term 'ratio data'. (2 marks)
- (b) **Explain** the relevance of the mean average for ratio data. (8 marks)
- (c) **Calculate** the mean for the following data set: 2, 2, 3, 3, 4, 4, 7, 7. (10 marks)

Question 3

- (a) **Explain** what is meant by the term box plot. (4 marks)
- (b) **Describe TWO** situations when it is useful to present data using box plots. (6 marks)
- (c) **Illustrate** the following data using a box plot: 2, 2, 3, 3, 4, 4, 7, 7. Use diagrams and/or examples to support your answer. (10 marks)

Question 4

- (a) **Explain** the meaning of the term 'sampling'. (4 marks)
- (b) **Describe** the stratified random sampling method. (6 marks)
- (c) **Compare** the difference between probability and non-probability sampling. (10 marks)

Question 5

Compare the implications of self-completed and administered research instruments. (20 marks)