



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 ' \approx '. (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: 1, 1, 1, 2, 2, 3, 3, 7. (10 marks)

Question 2

Compare the benefits and drawbacks of using Likert scales. (20 marks)

Question 3

- (a) Explain what is meant by the term line graph. (4 marks)
- (b) Describe TWO situations when it is useful to present data using a line graph. (6 marks)
- (c) Illustrate the following data using a line graph: (1, 1), (1, 2), (2, 3), (3, 7). Use diagrams and/or examples to support your answer. (10 marks)

Question 4

- (a) State what is meant by the term 'interval data'. (2 marks)
- (b) Explain the relevance of the mean average for interval data. (8 marks)
- (c) Calculate the sample mean using the following data set: 1, 1, 1, 2, 2, 3, 3, 7. (10 marks)

Question 5

- (a) Explain the meaning of the term 'Gaussian'. (4 marks)
- (b) Describe the central limit theorem. (6 marks)
- (c) Compare the difference between cluster and purposive sampling. (10 marks)