



# Professional Qualification in COMPUTING AND INFORMATION SYSTEMS

## Level 4 Diploma

### UNIT 3 – INFORMATION SYSTEMS ANALYSIS AND DESIGN

#### Question 1

- (a) **State TWO** skills needed by a systems analyst. (2 marks)
- (b) Referring to your response to Question 1a, **explain why EACH** skill is important. (6 marks)
- (c) Referring to your response to Question 1a, **illustrate how EACH** skill is used by a systems analyst. Use diagrams and/or examples to support your answer. (12 marks)

#### Question 2

- (a) **State** what is meant by the term 'work scope'. (2 marks)
- (b) **Explain why** it is important to define work scope. (6 marks)
- (c) **Illustrate** the key differences between projects **with** broad and narrow scopes. Use diagrams and/or examples to support your answer. (12 marks)

#### Question 3

- (a) **State** what is meant by the term 'model relation'. (2 marks)
- (b) **Explain why** relations are used in models. (6 marks)
- (c) **Illustrate THREE** key types of relation found in an object diagram. Use examples to support your answer. (12 marks)

#### Question 4

- (a) **Describe** the agile methodology. (4 marks)
- (b) **Explain** the key benefits of agile methodologies. (8 marks)
- (c) **Explain why** a software developer may avoid agile methodologies. (8 mark)

#### Question 5

**Discuss** whether the Spiral or Waterfall system development lifecycle is the **most** appropriate to use in a field of your choice. (20 marks)