



Professional Qualification in COMPUTING AND INFORMATION SYSTEMS

Level 4 Diploma

UNIT 3 – INFORMATION SYSTEMS ANALYSIS AND DESIGN

Question 1

- (a) **State TWO** skills that benefit a systems analyst. (2 marks)
- (b) Referring to your response to Question 1a, **explain why** these skills are beneficial. (6 marks)
- (c) Referring to your response to Question 1a, **explain TWO** ways in which these skills are applied in an information systems project. (12 marks)

Question 2

- (a) **Describe TWO** examples of non-functional requirement. (6 marks)
- (b) **Explain why** non-functional requirements are important. (6 marks)
- (c) **Compare** the differences between functional and non-functional requirements. (8 marks)

Question 3

- (a) **State** what data flow is. (2 marks)
- (b) **Explain** the difference between a data flow diagram and a use-case. (6 marks)
- (c) **Illustrate THREE** key components in a UML object diagram. Use diagrams and/or examples to support your answer. (12 marks)

Question 4

- (a) **State** what it means to follow an 'agile' methodology. (4 marks)
- (b) **Explain why** being agile is valuable. (8 marks)
- (c) **Explain how** evolving requirements and agile methods could affect the management of a project. (8 marks)

Question 5

Compare the SCRUM and RAD system development lifecycles. (20 marks)