



Professional Qualification in COMPUTING AND INFORMATION SYSTEMS

Level 4 Diploma

UNIT 3 – INFORMATION SYSTEMS ANALYSIS AND DESIGN

Question 1

- (a) **State** what is meant by the phrase 'iterative approach to change management'. (4 marks)
- (b) **Describe** Systems Development life cycle model. (8 marks)
- (c) **Explain** the benefits of using a structured approach to information systems development. (8 marks)

Question 2

- (a) **Describe** the key skills required to be a systems analyst. (6 marks)
- (b) **Describe** techniques for gathering information in a large organisation. (6 marks)
- (c) **Explain** the importance of testing a systems solution. (8 marks)

Question 3

- (a) **State** what is meant by the term 'UML use-case diagram'. (4 marks)
- (b) **Draw** and label a simple use-case diagram to model an airport check-in. (8 marks)
- (c) **Describe** different types of requirements in an information system design. (8 marks)

Question 4

- (a) **State** what is meant by the term 'sequence diagram' in the context of systems design. (6 marks)
- (b) **Compare** and **contrast** the relative benefits of using UML sequence diagrams and Data Flow Diagrams for a systems designer. (14 marks)

Question 5

- (a) **State** what is meant by the term 'SMART targets'. (4 marks)
- (b) **Describe** the strengths and weaknesses of project management technologies. (8 marks)
- (c) **Explain** how project management tools can be used in systems analysis. (8 marks)