



# Professional Qualification in COMPUTING AND INFORMATION SYSTEMS

## Level 4 Diploma

### UNIT 3 – INFORMATION SYSTEMS ANALYSIS AND DESIGN

#### Question 1

- (a) **Explain TWO** key skills required to be a systems analyst. (4 marks)
- (b) **Discuss** the influence of international competition when evaluating the feasibility of a new information system. (16 marks)

#### Question 2

- (a) **Identify THREE** key stakeholders of a large information systems project. (3 marks)
- (b) **Describe** the term 'functional requirement'. (3 marks)
- (c) **Describe TWO** ways in which functional requirements differ from other categories of requirement. (14 marks)

#### Question 3

- (a) **Describe ONE** way to gather requirements for a use-case diagram. (2 marks)
- (b) **Explain TWO** benefits of using a use-case to analyse requirements. (4 marks)
- (c) **Illustrate** how different entities are represented in a UML object model. Use diagrams and/or examples to support your answer. (14 marks)

#### Question 4

- (a) **Explain** the value of having specific and measurable objectives when planning a project. (4 marks)
- (b) **Illustrate TWO** ways in which a risk assessment could be conducted on the availability of resources for an information systems project. Use examples to support your answer. (16 marks)

#### Question 5

**Compare** the Waterfall life-cycle model with the Prototyping life-cycle model. (20 marks)