



**Professional Qualification in**  
**COMPUTING AND INFORMATION SYSTEMS**  
**Level 4 Diploma**

**UNIT 3 – INFORMATION SYSTEMS ANALYSIS AND DESIGN**

**Question 1**

- (a) **Identify** and **describe** a life cycle model for an information systems project. (10 marks)
- (b) With reference to your answer to Question 1a, **describe** the structured application from the initial feasibility through to the maintenance of the finished application for the selected model. (10 marks)

**Question 2**

**Describe** the different skills needed by a systems analyst to undertake the key roles of feasibility study, requirements gathering and analysis, design, and evaluation. (20 marks)

**Question 3**

Your client runs a car rental business. **Illustrate** the information flow between a customer and the company when making a booking by using an object-oriented approach to draw a UML use-case diagram. (20 marks)

**Question 4**

- (a) **Describe** the key differences between diagrams used to illustrate data flow in an information system. (10 marks)
- (b) **Illustrate** the data flow when logging into a password-based online account. (10 marks)

**Question 5**

- (a) **Discuss** the value of having SMART objectives for an information systems project. (10 marks)
- (b) **Explain** the value of **TWO** tools used for project management. (10 marks)