



Professional Qualification in
COMPUTING AND INFORMATION SYSTEMS
Level 4 Diploma

UNIT 3 – INFORMATION SYSTEMS ANALYSIS AND DESIGN

Question 1

Describe **ONE** feature of the Waterfall life cycle model for systems development. (5 marks)

Describe **ONE** feature of the SCRUM methodology model for systems development. (5 marks)

Question 2

Describe the advantages and disadvantages of the Waterfall systems development model. (10 marks)

Question 3

Describe the following roles of the systems analyst in an information systems project:

Developing a cost analysis. (5 marks)

Staff planning. (5 marks)

Question 4

Describe the advantages of each of the following requirements gathering techniques:

Group interviews. (5 marks)

Questionnaires. (5 marks)

Question 5

When considering the requirements for an information system project:

Describe **ONE** feature of a functional requirement. (5 marks)

Describe **ONE** feature of an environmental requirement. (5 marks)

Question 6

Describe the following benefits of using the Unified Modelling Language (UML) approach to modelling an information system:

- Scalability. (5 marks)

- Robustness of execution. (5 marks)

Question 7

When analysing the flow of information around an information system, describe what is meant by:

- Context diagram. (5 marks)

- Interaction between systems and actors. (5 marks)

Question 8

Describe how each of the following features of a UML sequence diagram can support systems design:

- Logic modelling. (5 marks)

- Object and component interaction. (5 marks)

Question 9

Describe the strengths and weaknesses of the Prince2 project management methodology. (10 marks)

Question 10

Describe **ONE** feature of a GANTT chart. (5 marks)

Describe **ONE** feature of a RAID log. (5 marks)