# Level 3 Requirements analysis and systems specification (7540-366/7630-347)



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## Systems and Principles (QCF) Assignment guide for Candidates

Assignment B



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City & Guilds
1 Giltspur Street
London EC1A 9DD
T +44 (0)844 543 0000 (Centres)
T +44 (0)844 543 0033 (Learners)

www.cityandguilds.com learnersupport@cityandguilds.com

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## Level 3 Requirements analysis and systems specification (7540-366/7630-347) Assignment B

Introduction – Information for Candidates

#### About this document

This assignment comprises all of the assessment for Level 3 Requirements analysis and systems specification (7540-366/7630-347).

#### **Health and safety**

You are asked to consider the importance of safe working practices at all times.

You are responsible for maintaining the safety of others as well as your own. Anyone behaving in an unsafe fashion will be stopped and a suitable warning given. You will **not** be allowed to continue with an assignment if you compromise any of the Health and Safety requirements. This may seem rather strict but, apart from the potentially unpleasant consequences, you must acquire the habits required for the workplace.

#### Time allowance

The recommended time allowance for this assignment is **8 hours**.

## Level 3 Requirements analysis and systems specification (7540-366/7630-347) Assignment B

Candidate Instructions

#### Time allowance: 8 hours

#### Assignment set up:

This assignment is made up of **four** tasks:

- Task A Feasibility
- Task B Analysis
- Task C Design
- Task D Maintain

#### Scenario

XYA Solutions provides complete IT systems solutions. As a contracted employee of XYA Solutions, you have been asked to undertake an investigation of customer requirements and produce a requirements definition for the implementation of an IT solution for the customer detailed below.

#### **Project brief**

Consugnia Ltd operates a nationwide chain of 50 medium sized shops selling an extensive range of sports and leisure equipment. Consugnia also has an agreement with a large supermarket chain to supply some of its products to their stores nationally.

The head office is situated in Bristol. Consugnia does not maintain any warehouses, its suppliers ship directly to its stores and supermarket partners.

The number of outlets and the range of products is increasing all the time and the company is now experiencing difficulties with its merchandising.

The head office has to maintain records on over 15,000 different products and issue orders to its suppliers for replenishments as stocks fall. This takes up much of the time of head office staff.

All products have a barcode on their packaging, which contains the product code.

The ordering patterns of the outlets vary. Some outlet managers demand large quantities with little warning and these cannot always be met from suppliers. Other managers order small quantities of single products therefore greatly increasing administrative work all round.

When these points are put to managers of Consugnia's own stores they point out that most of their staff are temporary or seasonal, and mainly unskilled employees. They agree that their ordering and stock checking should be better.

The popularity of Consugnia's products has resulted in very busy shops, which is leading to a deteriorating customer service and reputation. There have been an increasing number of customer

complaints about slow service and the unavailability of some products. The supermarket chain is becoming increasingly frustrated with the stock ordering system and the delays in receiving the stock.

An IT solution is required which will simplify and automate the procedures for ordering and maintaining stock levels. In particular the system should take advantage of new technology for example data communications, hand held devices for recording stock, computerised tills and barcode reading devices.

#### You must read the instructions and project brief carefully before you begin.

Read all of the instructions carefully and complete the tasks in the order given.

#### **Note**

You are required to produce a single report, containing sections that cover each of the assignment tasks. Include appendices for any charts, graphs, diagrams etc.

#### Task A – Feasibility

- 1 Produce a report, which clearly identifies the following:
  - the present situation in detail
  - the major problems
  - why a new system is required
  - what further information may be required to confirm the requirements
  - **two** suitable methods of obtaining such information
- 2 Draw either a Pert or GANTT chart that details the activities required to accurately carry out the investigation, analysis and requirements identification on the Consugnia scenario.

Ensure you follow established rules in your diagrams.

#### Task B – Analysis

- 1 Carry out an investigation on the scenario asking any questions you need to in order to meet the agreed plans. You will need to ask questions of the assessor in order to agree your plans.
- 2 Using the information gathered in Task B1 use standard diagrams to identify inputs, outputs and processes etc.
- Interpret the documents given (order form and invoice), and produce a document analysis grid.
- 4 Identify any constraints from your scenario and Interviews.
- 5 Obtain approval from your assessor to proceed from analysis to design before moving on to the next task.

#### Task C - Design

- 1 Now that you have carried out your investigation you need to design your new system.
  - Create your revised diagrams eg Data Flow Diagrams and Entity Relationship Diagrams, checking for errors as you go.
- 2 Create a data dictionary for your proposed system.
- 3 Create a decision table or tree for your proposed system and give a **brief** written explanation of its operation.
- Identify the hardware and software requirements of the new system. Identify the capacity requirements for the new system.
- 5 Produce specifications for security of the data inputs and data outputs of your proposed system.
- 6 Obtain approval from the assessor of your design before moving on to the next task.

#### Task D - Maintain

- 1 Identify and describe the implementation stages of your system.
- 2 Describe the training that would be required for the users of your new system.
- 3 Describe the methods of testing the designed system.
- 4 Describe the methods used to convert paper-based files to electronic files and the main problems associated with file conversion.
- Identify the typical documentation that you would be expected to provide on completion of the system.
- 6 Explain the purpose of version control.
- 7 Explain two purposes and/or processes of software Maintenance.

When you have finished working:

- Sign each document above your name and label all removable storage media with your name.
- Hand all paperwork and removable storage media to your assessor.

If the assignment is taken over more than one period, all paperwork and removable media must be returned to the test supervisor at the end of each sitting.

#### **End of assignment**

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1 Giltspur Street
London
EC1A 9DD
T +44 (0)844 543 0000 (Centres)
T +44 (0)844 543 0033 (Learners)
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