

**ADVANCED GCE UNIT
APPLIED INFORMATION AND COMMUNICATION
TECHNOLOGY**

G054

UNIT 15: Software Development
THURSDAY 18 JANUARY 2007

Morning

Time: 1 hour 30 minutes

Additional materials:
Pre-release material and tasks with candidate instructions
Candidate's pre-prepared materials



Candidate
Name

Centre
Number

--	--	--	--

Candidate
Number

--	--	--	--

INSTRUCTIONS TO CANDIDATES

- Write your name, Centre number and Candidate number in the boxes above.
- Answer **all** the questions.
- Use blue or black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully and make sure you know what you have to do before starting your answer.
- Do **not** write in the bar code.
- Do **not** write outside the box bordering each page.
- WRITE YOUR ANSWER TO EACH QUESTION IN THE SPACE PROVIDED. ANSWERS WRITTEN ELSEWHERE WILL NOT BE MARKED.

INFORMATION FOR CANDIDATES

- The number of marks is given in brackets [] at the end of each question or part question.
- The total number of marks for this paper is **100**.
- No marks will be awarded for using brand names of software packages or hardware.
- The quality of your written communication will be assessed through Q7a.

For Examiner's Use		Max
Task 2		13
Task 3		12
Task 4		5
1		4
2		3
3		6
4		4
5		6
6		3
7		15
8		9
9		5
10		5
11		5
12		5
Total		100

This document consists of **11** printed pages, **1** blank page and an insert.

BLANK PAGE

PLEASE DO NOT WRITE ON THIS PAGE

3 One of the process constraints that should be considered when developing a feasibility study is the time limit given by the client.

Identify **two** other process constraints that should be considered giving **two** examples of each.

Constraint 1

Example 1

.....

Example 2

.....

Constraint 2

Example 1

.....

Example 2

.....[6]

4 Describe **two** problems caused by the current system at Canal Capers.

Problem 1

.....

.....

Problem 2

.....

.....[4]

5 User requirements are defined during the feasibility stage.

Describe **two** user requirements of Canal Capers.

Requirement 1

.....

.....

.....

Requirement 2

.....

.....

.....[6]

6 Using questionnaires is one method of investigation.

Identify **one** other method of investigation suitable for use at Canal Capers, giving **two** reasons for your choice.

Method

Reason 1

.....

Reason 2

.....[3]

.....
.....
.....[12]

(b) Identify the most suitable implementation method for Canal Capers, justifying your choice.

Method

Justification

.....
.....
.....[3]

8 The staff at Canal Capers need to be trained to use the new system.

Explain, with reasons, the most suitable training strategy that could be used for each of the following groups of end-user:

(i) owner
.....
.....
.....
.....
.....
.....[3]

(ii) administration staff
.....
.....
.....
.....
.....
.....[3]

(iii) boat yard staff
.....
.....
.....
.....
.....
.....[3]

Section B

You do not need the case study or your notes to answer these questions.

9 During the design of a new system a physical design specification is developed.

(a) Identify **three** components of the software specification part of the physical design specification.

Component 1

.....

Component 2

.....

Component 3

.....[3]

(b) Identify **two** components of the output specification part of the physical design specification.

Component 1

.....

Component 2

.....[2]

10 A data dictionary should be developed during the systems life cycle.

(a) Explain the function of a data dictionary.

.....
.....
.....
.....
.....[3]

(b) Identify **two** components of a data dictionary.

Component 1
Component 2[2]

11 During the development of a software system it is possible to use a customised off-the-shelf software package or to write a bespoke software package.

Explain the advantages and disadvantages of using a customised off-the-shelf software package, rather than a bespoke software package.

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....[5]

PLEASE DO NOT WRITE ON THIS PAGE

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (OCR) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

OCR is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.