

**ADVANCED GCE
APPLIED INFORMATION AND COMMUNICATION
TECHNOLOGY**

G054

Software Development

Candidates answer on the question paper.

OCR supplied materials:

- Instructions for Candidates G054/IC (inserted)

Other materials required:

- Candidate's pre-prepared materials

**Thursday 23 June 2011
Morning**

Duration: 1 hour 30 minutes



Candidate forename		Candidate surname	
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Centre number							Candidate number				
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INSTRUCTIONS TO CANDIDATES

- The insert will be found in the centre of this document.
- Write your name, centre number and candidate number in the boxes above. Please write clearly and in capital letters.
- Use black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully. Make sure you know what you have to do before starting your answer.
- Write your answer to each question in the space provided. Additional paper may be used if necessary but you must clearly show your candidate number, centre number and question number(s).
- Answer **all** the questions.
- Do **not** write in the bar codes.
- Attach your pre-prepared materials for tasks 1-4.

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 Q6 and 12.
- This document consists of **12** pages. Any blank pages are indicated.

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

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Section A

This section relates to the case study on A Clean House.

- 1 One of the purposes of the proposed system is to keep records of customers who use or have recently used A Clean House.

Describe **two** other purposes of the new system.

Purpose 1

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Purpose 2

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..... [4]

- 2 User requirements have been defined by the owner of A Clean House.

Describe **two** user requirements that have been defined by the owner that relate to the suppliers.

Requirement 1

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Requirement 2

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..... [4]

3 During the development of the feasibility study, functional requirements are defined.

Using examples from A Clean House, explain the term functional requirements.

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..... [6]

4 During the development of the feasibility study process constraints should be considered.

(a) Describe **one** defined hardware constraint.

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(b) (i) Identify **one** other process constraint, apart from software and time, that has been defined by A Clean House.

..... [1]

(ii) Describe how this has been defined by A Clean House.

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..... [2]

5 Describe the problems caused by the current system at A Clean House, which relate to the suppliers of the cleaning materials.

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- 7 Following the implementation of the new system in A Clean House, users have requested changes to the system.

Identify and describe the maintenance strategy that would be used to implement these changes.

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- 8 The increased security of the data and information held on the computers at A Clean House has been defined as one of the user requirements.

Identify and describe **two** logical security measures that could be used by A Clean House.

Measure 1

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Measure 2

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- 9 Following the implementation of the new system, detailed program specifications will be passed to A Clean House.

Explain how detailed program specifications could be used by A Clean House.

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Section B

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

10 When a system has been developed and tested it needs to be implemented.

Describe the following implementation methods:

(i) direct/big bang

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..... [3]

(ii) parallel

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11 Entity Relationship Diagrams (ERD's) and Data Flow Diagrams (DFD's) can be used during the analysis and design stage of the systems lifecycle.

(a) Explain the function of an ERD.

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10

(b) Draw and label **two** components of a DFD.

[4]

- 12** Evaluate informal methods of modelling data flows within the systems life cycle.

The quality of written communication will be assessed in your answer to this question.

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[7]

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