

ADVANCED GCE
**APPLIED INFORMATION AND COMMUNICATION
TECHNOLOGY**
Software Development
G054


Candidates answer on the Question Paper

OCR Supplied Materials:

- Instructions for Candidates G054/IC (inserted)

Other Materials Required:

- Candidate's pre-prepared materials

Monday 14 June 2010
Afternoon
Duration: 1 hour 30 minutes


Candidate Forename					Candidate Surname				
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Centre Number						Candidate Number			
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INSTRUCTIONS TO CANDIDATES

- Write your name clearly in capital letters, your Centre Number and Candidate Number in the boxes above.
- Use black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully and make sure that you know what you have to do before starting your answer.
- Answer **all** the questions.
- Do **not** write in the bar codes.
- Write your answer to each question in the space provided, however additional paper may be used if necessary.
- 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 Q13.
- This document consists of **12** pages. Any blank pages are indicated.

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

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Section A**This section relates to the case study on Hideaway Sheds.**

One of the purposes of the new system for Hideaway Sheds is to solve the problems caused by the current system.

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

Purpose 1

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Purpose 2

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[4]

- 2** The owner of Hideaway Sheds has defined requirements of the new system.

Explain the importance of defining user requirements during the feasibility study.

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[4]

- 3 During the development of the feasibility study functional and non-functional requirements are defined.

- (a) Describe **two** functional requirements that have been defined by the administration staff.

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[4]

- (b) Describe the non-functional requirement that has been defined by the owner

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[2]

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

- (a) Describe the hardware constraint that has been defined by the warehouse staff at Hideaway Sheds.

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[2]

- (b) (i) Identify **one** process constraint, apart from hardware and time, that has been defined by Hideaway Sheds.

..... [1]

- (ii) Describe how this has been defined by Hideaway Sheds

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[3]

- 5 Some of the problems caused by the current system relate to the stock system used in the warehouse.

Describe the problems relating to the stock system used in the warehouse.

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[4]

- 6** The new system can be created using off-the-shelf software or by writing bespoke software.

Explain the advantages **and** disadvantages to Hideaway Sheds of creating the system using off-the-shelf software.

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

. [12]

- 7 The owner of Hideaway Sheds has asked that the supplier and customer records are held on computer.

- (i) Identify the Act that needs to be considered when holding the supplier and customer records.

..... [1]

- (ii) Explain **one** implication of the Act to Hideaway Sheds

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[3]

- (iii) Identify the most appropriate type of software for storing these records, justifying your choice.

Software

Justification

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[3]

- 8 The owner has requested that the new system has full internet access with email communication.

Identify the most suitable hardware device for this task, justifying your choice.

Device

Justification

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[3]

- 9 Following the implementation of the new system into Hideaway Sheds errors have been found by the users.

Identify and describe the maintenance strategy that would be used to correct these errors.

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[4]

Section B

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

- 10** Investigations are carried out as part of the feasibility stage.

Describe **two** benefits and **one** limitation of using interviews as an investigation method.

Benefit 1

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Benefit 2

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Limitation

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..... [6]

- 11** Verification can be used to check the data that is being input into a system.

- (a) Explain the term verification.

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..... [2]

- (b) Describe **one** method of verification.

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10

12 During the systems life cycle a data dictionary could be developed.

(a) Explain the function of a data dictionary.

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[3]

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

Component 1

Component 2 [2]

13 Evaluate the use of a formal method of modelling data flows within a system.

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

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[5]

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