

**Tuesday 12 June 2012 – Afternoon**

**A2 GCE APPLIED INFORMATION AND COMMUNICATION TECHNOLOGY**

**G054/01 Software Development**



Candidates answer on the Question Paper.

**OCR supplied materials:**

- Instructions for Candidates G054/01/IC (inserted)

**Other materials required:**

- Candidate's pre-prepared materials for pre-release tasks 1, 2, 3 and 4.

**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. HB pencil may be used for graphs and diagrams only.
- Answer **all** the questions.
- 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).
- Do **not** write in the bar codes.
- Attach your pre-prepared materials for tasks 1-4.

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

**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 Q12.
- This document consists of **12** pages. Any blank pages are indicated.

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**Section A**

**This section relates to the case study on The Corner Shop.**

- 1 During the feasibility study the purposes of the new system are defined. One purpose of the new system for The Corner Shop is to upgrade the software.

- (a) Describe **two** other purposes of the new system.

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2 .....

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[4]

- (b) Explain why the purpose of the new system should be defined during the feasibility study.

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[4]

- 2 User requirements have been defined by the end-users of the new system for The Corner Shop.

Describe **one** user requirement that has been defined by the administration staff.

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[2]

- 3 Functional and non-functional requirements have been defined during the feasibility study.

Describe the functional requirement that relates to the suppliers of stock to The Corner Shop.

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[4]

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

(a) Describe the defined time constraint.

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..... [3]

(b) (i) Identify **one** other process constraint, apart from time and hardware, that has been defined by The Corner Shop.

..... [1]

(ii) Describe how this has been defined by The Corner Shop.

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..... [3]

5 Describe **two** problems caused by the current system which relate to the stock in the warehouse.

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

Explain the advantages **and** disadvantages to The Corner Shop of creating the system by writing bespoke software.

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

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..... [12]

7 The accounts staff have asked that supplier details are held on computer.

(i) Identify the Act that needs to be considered when holding the supplier details.

..... [1]

(ii) Identify the most appropriate type of software for storing these details, justifying your choice.

Software .....

Justification .....

..... [3]

(iii) Increased security on the computers used by the administration staff will have to be implemented when they can access supplier details.

Explain the importance of security when holding the supplier details.

..... [5]

- 8 Following the implementation of the new system in The Corner Shop, the shop managers have asked that the colours used on the screen be changed.

Identify and describe the maintenance strategy that will be used to implement this change.

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[4]

**SECTION B**

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

- 9** During the design of a new system an input specification is developed.

Identify **two** components of an input specification.

1 .....

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2 .....

[2]

- 10** Validation and verification can be used to check the data that is being input into a system.

**(a)** Explain the term **validation**.

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[2]

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

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[2]

**10**

**11** System flowcharts can be used during the analysis and design stages of the systems lifecycle.

**(a)** Describe a system flowchart.

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**[4]**

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

**[4]**

- 12** When a new system is developed the end-users will need to be trained to use the system.

Evaluate the use of the day release training method for training staff in a large organisation.

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

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**[6]**

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