

## Friday 16 June 2017 – Morning

### A2 GCE

### APPLIED INFORMATION AND COMMUNICATION TECHNOLOGY

#### G054/01 Software development

Candidates answer on the Question Paper.

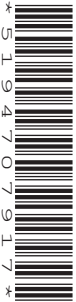
**OCR supplied materials:**

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

**Other materials required:**

- Candidate's pre-prepared materials

**Duration:** 1 hour 30 minutes



Candidate forename		Candidate surname	
--------------------	--	-------------------	--

Centre number						Candidate number				
---------------	--	--	--	--	--	------------------	--	--	--	--

#### INSTRUCTIONS TO CANDIDATES

- The Insert will be found inside 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).
- Attach your pre-prepared materials for tasks 1–4.
- Do **not** write in the bar codes.

#### 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 given for using brand names of software packages or hardware.
- The quality of your written communication will be assessed through Q5 and Q11.
- 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		7
3		7
4		4
5		12
6		7
7		9
8		4
9		4
10		4
11		8
Total		100

Answer **all** questions.

**SECTION A**

**This section relates to the case study on The Wendy House Place.**

- 1 The owner of The Wendy House Place has defined the purposes of the proposed system. One of these relates to reports.

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

1 .....

.....

.....

.....

.....

2 .....

.....

.....

.....

**[4]**

- 2 During the feasibility study, functional and non-functional requirements will be defined.

(a) Describe the defined **functional** requirements that relate to suppliers.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

**[4]**

(b) Describe the **non-functional** requirement which relates to the proposed stock system.

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

3 Process constraints should be considered during the development of the feasibility study.

(a) Describe the defined **time** process constraint.

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

(b) Time, hardware and budget are three process constraints.

(i) Identify **one** other process constraint that has been defined by The Wendy House Place.

.....  
..... [1]

(ii) Describe how this process constraint has been defined by The Wendy House Place.

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

- 4 The current system at The Wendy House Place has a number of problems. One of these problems is having a direct impact on their customers.

Explain the problem that impacts the customers of The Wendy House Place.

.....

.....

.....

.....

.....

.....

.....

.....

..... [4]



6 The owner of The Wendy House Place is concerned about the security of the data and information held on the current system.

(a) Explain how using the automatic features of security software could increase the security of the data and information held on the new system.

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
..... [4]

(b) Identify and describe **one** physical security method which could be implemented at The Wendy House Place.

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

7 Following the implementation of the new system at The Wendy House Place, the workshop staff will be trained using the on-the-job training method.

(a) Describe the on-the-job training method.

.....  
.....  
.....  
..... [2]

(b) Describe **one** advantage and **one** disadvantage to The Wendy House Place of using this training method.

Advantage .....

.....  
.....  
..... [2]

Disadvantage .....

.....  
.....  
..... [2]

(c) Identify and describe **one** other training method which could be used at The Wendy House Place.

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

SECTION B

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

8 An entity relationship diagram (ERD) is one technique that can be used during the investigation stage of the systems life cycle.

(a) A many to many (M:M) relationship can be shown on an ERD.

Explain what is meant by a M:M relationship.

.....  
.....  
.....  
.....  
..... [2]

(b) Describe how a M:M relationship can be resolved.

.....  
.....  
.....  
.....  
..... [2]

9 During the feasibility study information will be collected and an output specification will be created.

(a) The **type of data used** is one piece of information that will be collected.

Identify **two** other pieces of information about data that will be collected.

1 .....  
2 ..... [2]

(b) Screen report layouts form one component of the output specification.

Identify **two** other components of the output specification.

1 .....  
2 ..... [2]



10 Following the development of a new system, it will need to be implemented.

Describe the **phased** implementation method.

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... [4]



11  
BLANK PAGE

PLEASE DO NOT WRITE ON THIS PAGE

**PLEASE DO NOT WRITE ON THIS PAGE**

---

**OCR**  
Oxford Cambridge and RSA

**Copyright Information**

OCR is committed to seeking permission to reproduce all third-party content that it uses in its assessment materials. OCR has attempted to identify and contact all copyright holders whose work is used in this paper. To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced in the OCR Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download from our public website ([www.ocr.org.uk](http://www.ocr.org.uk)) after the live examination series.

If OCR has unwittingly failed to correctly acknowledge or clear any third-party content in this assessment material, OCR will be happy to correct its mistake at the earliest possible opportunity.

For queries or further information please contact the Copyright Team, First Floor, 9 Hills Road, Cambridge CB2 1GE.

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.